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## BEFORE THE ARIZONA CORPORATION COMMISSION

CARL J. KUNASEK

CHAIRMAN

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COMMISSIONER

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COMMISSIONER

2001/23 A 0 34

AT CORP COMMISSION  
INVESTMENT CONTROL

IN THE MATTER OF THE APPLICATION OF  
THE ARIZONA ELECTRIC DIVISION OF  
CITIZENS COMMUNICATIONS COMPANY  
TO CHANGE THE CURRENT PURCHASED  
POWER AND FUEL ADJUSTMENT CLAUSE  
RATE, TO ESTABLISH A NEW  
PURCHASED POWER AND FUEL  
ADJUSTMENT CLAUSE BANK, AND TO  
REQUEST APPROVED GUIDELINES FOR  
THE RECOVERY OF COSTS INCURRED IN  
CONNECTION WITH ENERGY RISK  
MANAGEMENT INITIATIVES.

DOCKET NO. E-01032C-00-0751

## APPLICATION

The Arizona Electric Division ("AED") of Citizens Communications Company ("Citizens") submits this application to the Arizona Corporation Commission seeking approval (i) to change the current Purchased Power and Fuel Adjustment Clause ("PPFAC") rate, (ii) to freeze and amortize over a period of three years the balance in the existing PPFAC Bank as of September 30, 2000, (iii) to establish a new PPFAC Bank that would track power supply costs prospectively based on a twelve-month rolling average basis, and (iv) to begin accruing carrying charges on the accumulated balance of over or under-recovered power supply costs.

The AED is also requesting approval to implement energy risk management initiatives intended to improve rate stability by reducing the volatility of power supply costs associated with competitive wholesale power markets. The AED asks that the Commission establish guidelines that would be applied to recover costs associated with the implementation of these initiatives.

1 Finally, the AED asks that the Commission issue any approvals needed in  
2 connection with proposed billing initiatives designed to minimize the impact of  
3 increased electric bills.

4 **I. BACKGROUND**

5 Citizens is a Delaware corporation with operating divisions and subsidiaries  
6 providing telecommunications, energy and water utility service to more than 1.9  
7 million customers in 22 states. The AED serves some 70,000 customers in  
8 Mohave and Santa Cruz Counties. The AED's last electric rate case was based  
9 upon a March 31, 1995, test year, with new rates effective January 1, 1997.

10 The AED is primarily an electric transmission and distribution utility. Its  
11 only generation capability is a 45 MW combustion turbine facility in Nogales,  
12 which serves to provide capacity to backup the long radial transmission line  
13 serving Santa Cruz County and to reduce power supply costs through capacity  
14 credits from Arizona Public Service Company ("APS"). The customers of the AED  
15 are located in and around three distinct areas – the City of Kingman, Lake Havasu  
16 City in Mohave County, and the City of Nogales in Santa Cruz County. Customers  
17 in each of these three cities, including surrounding areas, are independently  
18 served through separate transmission substations connecting the AED's sub-  
19 transmission network to the transmission grid of the Department of Energy's  
20 Western Area Power Administration ("WAPA"). WAPA's transmission grid provides  
21 the AED with access to its sole bulk power supplier, APS.

22 As stated, the AED is a generation-dependent utility. For nearly thirty  
23 years, with a few minor exceptions, its sole power source has been a full  
24 requirements contract with APS. Power supply expenses have been recovered by  
25 the AED through the power cost component of basic service rates and the  
26 operation of the Purchased Power and Fuel Adjustment Clause, as more fully  
27 explained later. Under the traditional regulatory paradigm in Arizona, this  
28 arrangement has served the AED and its customers well. The AED has been  
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1 afforded a reasonable opportunity to recover its purchased power expenses, and  
2 its customers have enjoyed relatively stable and economical rates. In recent  
3 months, however, this historical pattern has abruptly and significantly changed.

4 With the onset of the warmer summer months, the AED has experienced  
5 increases in its monthly power bills ranging from 50% to more than 100%  
6 greater than those received in the corresponding months of prior years. This  
7 may be attributed to a variety of factors, including abnormal weather conditions,  
8 increasing demand relative to available generating capacity in this region of the  
9 Country, and the volatility associated with the deregulation that has occurred in  
10 the natural gas industry and in wholesale electric power markets.

11 The unprecedented power-supply-cost increases experienced in recent  
12 months are being closely scrutinized by Citizens. In addition to the normal due  
13 diligence analyses undertaken at the time monthly power bills are received,  
14 Citizens has undertaken an expanded effort to assure the bills are in accordance  
15 with the terms of the contract with APS, to identify the reasons for the higher  
16 costs, and to investigate APS historic management of its power supply obligation.

17 Given the magnitude of power supply cost increases currently being  
18 experienced, the traditional operation of the PPFAC would require rate  
19 adjustments of unprecedented magnitudes, causing substantial rate shock for our  
20 customers. Extraordinary costs require a non-traditional regulatory response.  
21 Accordingly, this filing contains proposed modifications to the traditional power  
22 supply cost recovery scenario, along with certain commitments intended to  
23 provide the AED a reasonable opportunity to recover its costs while, at the same  
24 time, mitigating the economic burden on current customers. Moreover, Citizens  
25 is also requesting guidance from the Commission concerning future recovery of  
26 costs incurred in connection with the implementation of certain measures  
27 intended to mitigate energy-management risk.

## **II. PURCHASED POWER AND FUEL ADJUSTMENT CLAUSE**

As a generation-dependent electric utility, the AED receives no profit from the resale of purchased electricity. Power supply costs not recovered in basic service rates must be recovered from the operation of the PPFAC mechanism.

The Commission has long recognized the usefulness of cost recovery mechanisms by gas and electric utilities operating in the State of Arizona. As early as 1952, the AED had a rate adjustment mechanism in place that enabled it to track and recover its power supply costs. The current PPFAC procedure was approved in Commission Decision No. 49576, issued in December 1978, after a generic proceeding investigating purchased power and fuel adjustment clauses. That decision established a uniform method of reporting by affected utilities. It also provided for limited hearings after which the Commission could authorize the use of billing adjustment factors that would enable a utility to recover from or pass back to customers, the difference between fuel and purchased power costs incurred and the amounts recovered from customers. The AED is now the only investor-owned utility with a PPFAC.

A key element of the current purchased power cost recovery mechanism is the PPFAC Bank Account ("Bank"), a regulatory asset used to reconcile power costs and recoveries. All power purchases are charged to the Bank and all power cost recoveries are credited to the Bank. The remaining balance in the account represents the cumulative over or under-recovery of power supply expenses.

Under the traditional PPFAC procedure, a projection of power supply costs for the next six months is required to be included in the standard monthly report filed with the Commission Staff. If such projections indicate an increase or decrease in power supply costs of one mill or more, the Staff is to recommend to the Commission that a hearing be held to consider an appropriate change to the existing PPFAC rate.

1 In Decision No. 62094, issued in November 1999, the PPFAC procedure for  
2 the AED was modified so that the existing one-mill threshold was replaced by an  
3 equivalent Bank balance trigger of \$2,600,000. When the absolute value of the  
4 Bank exceeds \$2,600,000, the AED is required to either file for a rate adjustment  
5 or contact the Commission Staff to discuss why an adjustment would not be  
6 appropriate.

7 Over the years, the PPFAC mechanism has worked well for the AED and its  
8 customers. On a number of occasions, increases or decreases to the PPFAC rate  
9 were approved by the Commission, as were refunds to customers after extended  
10 periods during which the costs of purchased power declined to levels below that  
11 implicit in basic service rates. However, especially given recent events, the  
12 PPFAC cannot continue to be effective in its current form as the electric industry  
13 in Arizona moves to fully deregulated generation.

14 The current basic service rates of the AED reflect an average power supply  
15 cost of 5.194 cents-per-kilowatt-hour ("kWh"). That includes 4.802 cents-per-  
16 kWh for electric generation and 0.392 cent-per-kWh for the cost of transporting  
17 power over the transmission lines of the WAPA. Since December 1999, the AED  
18 has been reflecting on customer bills, the 0.553 cent-per-kWh credit PPFAC factor  
19 that was approved by the Commission in Decision No. 62094. The credit includes  
20 a cumulative over-recovery in the Bank exceeding the \$2.6 million threshold, plus  
21 the prospective annual savings associated with certain negotiated reductions in  
22 demand charges on the APS power bills, which will be explained in greater detail  
23 later. In accordance with Decision No. 62094, the credit is scheduled to be  
24 reduced from 0.553 to 0.297 cents at the end of November 2000, when the  
25 entire over-recovery was projected to be returned to customers. In actuality,  
26 due to higher sales in recent months, Citizens projects that all but approximately  
27 \$42,000 of the original bank balance amount will be returned to customers by the  
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1 end of October. Therefore, if the current rate of refunding continues through  
2 November as originally scheduled, Citizens projects there would actually be an  
3 over-refunding of some \$179,000.

4 As of April 30, 2000, the balance reported in the Bank was \$2.2 million  
5 over-recovered, all being returned to customers via a portion of the 0.553 cent-  
6 per-kWh credit PPFAC factor previously described. During May, there was a  
7 dramatic change in the Bank due to unprecedented power supply costs. As  
8 indicated on accompanying Exhibit No. 1, which is a copy of the Report FA-1  
9 included with Citizens' May PPFAC filing, the AED's power supply costs  
10 skyrocketed to more than 11.4 cents-per-kWh. With the current recovery  
11 through basic service rates and the PPFAC factor netting only 4.6 cents-per-kWh,  
12 the Bank balance that began as a \$2.2 million over-recovery became a \$3.6  
13 million under-recovery by month end.

14 That trend has continued in the ensuing months. Power bills from APS for  
15 June and July were \$16.1 million and \$19.3 million, respectively, representing  
16 per-kilowatt-hour costs in excess of twelve cents. This trend is expected to  
17 continue through the month of September. To put such amounts into  
18 perspective, the average cent-per-kWh power supply costs for June, July, August,  
19 and September of 1999 were 4.67, 4.65, 4.78, and 4.96, respectively. By the  
20 end of September, Citizens projects the under-recovered balance in the Bank to  
21 reach \$52.3 million. For comparisons, in the entire calendar year 1999, the  
22 AED's total purchased power and transmission expense was \$56 million, with  
23 operating revenues just under \$99 million.

24 To the extent the existing power cost recovery procedure continues in its  
25 current form, as indicated on Exhibit No. 2, the balance in the Bank is projected  
26 to grow to nearly \$57 million by the end of next May. As part of this application,  
27 the AED is asking to immediately discontinue the current 0.553 cent-per-kWh  
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1 credit on customer bills. It makes no sense to continue to pass on a one-half  
2 cent credit when current power supply costs exceed current recoveries by more  
3 than seven cents.

4 Still, discontinuing the credit is not enough; the projected effect of  
5 discontinuing the current PPFAC credit factor is relatively insignificant. As shown  
6 on Exhibit No. 3, to the extent the credit ceases as of the end of September, the  
7 projected balance at the end of May 2001 is reduced by only \$2.5 million to a  
8 level of about \$54.1 million.

9 Under the traditional application of the PPFAC mechanism, when a utility's  
10 Bank was under-recovered by more than the established threshold, the  
11 Commission has generally allowed it to adjust its PPFAC factor to allow recovery  
12 within six to twelve months. As shown on Exhibit No. 4, a PPFAC rate in excess  
13 of 7.5 cents would be required to fully recover the Bank balance by the end of  
14 May 2001. The imposition of such a PPFAC adjustment factor would create  
15 tremendous rate shock for the AED's customers. Citizens is not requesting  
16 approval of such a rate, but includes the exhibit in this filing for informational  
17 purposes and to demonstrate its concerns about the continuing feasibility of the  
18 traditional PPFAC mechanism. Alternative recovery scenarios are clearly needed.

19 In October 1998, the Commission issued Decision No. 61225 after a generic  
20 investigation of the Purchased Gas Adjustors ("PGA") being used by the local  
21 distribution companies ("LDCs") in Arizona. Unlike the standard PPFAC  
22 mechanism being used by the electric companies, the PGAs were more company-  
23 specific. The genesis of the PGA inquiry was that during the two previous winter  
24 heating seasons, the Commission had received numerous complaints from natural  
25 gas customers about their monthly gas bills fluctuating greatly from month-to-  
26 month. This was largely attributed to significant spikes in the price of gas plus  
27 the fact that most of the LDCs' PGA rates reflected the current month's cost of  
28 gas. The Commission's decision included several changes to the existing PGA  
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1 mechanism intending to standardize the approach used by all companies and to  
2 recognize the volatility in market prices being experienced as a result of the  
3 Federal deregulation that has occurred in the natural gas industry.

4 These changes to the PGA mechanism included:

- 5 • Freezing of the existing PGA Bank balances with recovery or  
6 repayment over twelve months;
- 7 • Creating a new PGA Bank account;
- 8 • Using a twelve-month rolling average for the cost of gas;
- 9 • Establishing new thresholds for the LDCs' PGA Bank balances;
- 10 • Allowing monthly changes to the PGA rate without a Commission  
11 hearing, subject to a seven cent per therm change limit over any 12-  
12 month period; and
- 13 • Accruing carrying charges on the PGA Bank balance.
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15 Many of the same concerns that the Commission addressed in modifying  
16 the PGA mechanism now need to be addressed in the current PPFAC mechanism  
17 during the transition to electric generation competition.

18 The PGA decision also reflects the Commission's most recent published  
19 thoughts about the use of automatic cost recovery mechanisms to recover  
20 commodity supply costs incurred in a deregulated energy market. Accordingly,  
21 Exhibit No. 5 was prepared to ascertain the effect on the AED and its customers  
22 to the extent the new PGA mechanism was also used for PPFAC purposes. As  
23 shown on Exhibit No. 5, adoption of the PGA approach to electric power supply  
24 cost recovery would require a total PPFAC factor ranging from 4.9 to more than 8  
25 cents-per-kWh over the next twelve months. Citizens is not requesting adoption  
26 of the PGA approach; the exhibit is presented only for informational purposes.



1 As has been shown, traditional operation of the PPFAC mechanism will  
2 adversely affect both the AED and its customers. For the AED to recover its  
3 power supply costs in a timely fashion, unprecedented, immediate increases in  
4 customers bills would be necessary causing significant rate shock and economic  
5 hardship for our customers. As more fully explained later in this application,  
6 Citizens is requesting Commission approval of a plan that varies from the  
7 traditional PPFAC approach, and that has both rate and non-rate elements  
8 intended to afford the AED a reasonable opportunity to recover its power supply  
9 costs while mitigating the current economic impact on its customers.

### 10 **III. AED POWER SUPPLY**

#### 11 **A. Power Supply Arrangements Through 1995**

12 The AED has historically procured essentially all of its power supply  
13 requirements under wholesale purchased-power contracts subject to the  
14 jurisdiction of the Federal Energy Regulatory Commission ("FERC") and its  
15 predecessor, the Federal Power Commission. Before 1971, the sole source of  
16 electricity for AED's customers was the Arizona Power Authority. Since the  
17 expiration of that agreement on December 31, 1970, APS has supplied almost all  
18 of the AED's power needs under long-term agreements for firm power and  
19 energy.

20 In 1995, at the time of the last AED rate case, Citizens had just  
21 renegotiated its contract with APS. Negotiations lasting more than a year were  
22 directed at developing a comprehensive agreement designed to encompass all of  
23 the AED's load and resource requirements. The AED service territory had been  
24 experiencing, and continues to experience, a relatively rapidly growing load.  
25 Citizens' principal objective in the negotiations was to obtain greater flexibility  
26 while reducing costs.

27 The negotiations resulted in a new APS Power Service Agreement ("PSA")  
28 that included Service Schedules A, B, C, and D. It superceded all prior  
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1 contractual arrangements. New Service Schedules A, B, and C addressed the  
2 AED's explicit requirements for base load capacity, intermediate load capacity,  
3 and non-firm peaking energy, respectively. Schedule D focused on future  
4 resource planning matters.

5 The new Service Schedule A provided 100 MW of firm base load capacity,  
6 thereby enabling the AED to access all the resources available to APS. It  
7 effectively mirrored APS' total system mix, comprised predominately of nuclear  
8 and coal-fired generation. Schedule A also included fixed pricing through May  
9 1998, guaranteed fuel diversity, and made available an additional 50 MW of firm,  
10 low cost, off-peak energy.

11 Under the new Service Schedule B, APS agreed to perform an after-the-fact  
12 dispatch, on a month-to-month basis, to optimize purchases under the three APS  
13 service schedules. Only the capacity and energy from Schedule B that is required  
14 would be utilized. New capacity and energy pricing terms under Schedule B were  
15 firm through May 1998. Such contract pricing, combined with the after-the-fact  
16 dispatch and lack of purchase minimums or maximums, made the new Service  
17 Schedule B a more flexible, cost effective match to the AED's system  
18 requirements.

19 New Service Schedule C was intended to provide peaking energy. A key  
20 element of this part of the APS contract was the establishment of a capacity  
21 credit for the AED's Valencia gas turbine and diesel generating facility in Nogales.

22 Service Schedule D set forth the terms and conditions for integrating the  
23 Nogales generation and future planned generation capacity for the AED with that  
24 owned by APS, as more fully explained below.

#### 25 **B. Power Supply Arrangements Since 1995**

26 Since the signing of the APS PSA and associated Service Schedules in 1995,  
27 Citizens and APS have engaged in a number of contracting activities, including  
28 execution of a Resource Integration agreement under Schedule D and a Power  
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Purchase Agreement, and have also on-going contract discussions on the pricing and terms of the power supply arrangements between the parties. A significant factor in these discussions has been the development of new generation resources in the AED's service area by competitive power developers. APS contract discussions have led to agreements (or pending agreements) to modify the PSA in four key areas: (i) a reduction in the demand charges under Service Schedule A; (ii) a refund to settle disputes about billing procedures; (iii) an agreement to allow reductions in Schedule A contract demand levels; and (iv) a restructuring of pricing for the PSA Service Schedules.

**1. Resource Integration and Power Purchase Agreements**

Facing the need to meet growing electric demand in Mohave County, Citizens undertook two essentially parallel efforts in the mid-1990's. First, Citizens prepared and issued a Request-for-Proposals ("RFP") for energy and capacity to meet its forecasted local resource needs. Second, recognizing the growing complexity of effectively managing an expanding portfolio of electric generation resources, combined with the possibility of achieving economic synergies, Citizens pursued a new operational agreement addressing its existing and planned generation resources with APS. Under Schedule D, APS would integrate Citizens' generation units into its electric dispatch operations so that it could maximize operational efficiency by serving Citizens' load requirements using power and energy supplied by APS' system or by dispatching one or more of Citizens' generation units, based on the most economic result. In response to the RFP, APS submitted a proposal to build a 75 MW simple-cycle combustion turbine facility at a site in Mohave County and to enter a long-term agreement with Citizens for the purchase of the electric output of that facility. APS' proposal was ultimately selected as the winning bid, and an agreement was executed. The terms of the resulting business arrangement included: (i) amending Service Schedule D – Resource Integration to accommodate the APS gas turbine facility

1 in Mohave County; (ii) executing a Power Purchase Agreement (a 20-year  
2 agreement for Citizens' purchase of the plant's output); and (iii) amending the  
3 provisions of Service Schedules A and B. The amendments to Schedule A allowed  
4 Citizens to increase its access to off-peak energy, while the amendments to  
5 Schedule B modified its contract term and termination provisions.

6 In mid-1998, the construction of a 650-MW, combined-cycle, generation  
7 station in Mohave County, ultimately known as the "Griffith Energy Project," was  
8 initiated by PP&L Global, a competitive power development arm of Pennsylvania  
9 Power & Light. This new power facility would require transmission facilities to  
10 transport its output into the western electric markets. At the time, Citizens was  
11 beginning to consider the feasibility of constructing transmission facilities to carry  
12 the power from the planned APS combustion turbine plant tying into both the  
13 Kingman and Lake Havasu City load centers. The new transmission line was  
14 expected to use a corridor passing very near the site being proposed for the  
15 Griffith project. Given their common interests surrounding new electric  
16 transmission facilities in Mohave County, Citizens and the project developers  
17 worked closely together to seek mutually beneficial solutions. The siting of the  
18 Griffith Project in Mohave County and the planned construction and  
19 reinforcements to local transmission facilities effectively addressed Citizens' near-  
20 term transmission requirements and would eliminate the need for the planned  
21 APS' generation facility anticipated under the Citizens/APS Power Purchase  
22 Agreement. Moreover, Citizens' already-permitted transmission corridor between  
23 the proposed APS plant site and Kingman was of value to the Griffith developers  
24 to affect the needed transmission improvements. Consequently, Citizens  
25 undertook two actions in late 1998/early 1999 that significantly reduced its costs  
26 that were potentially stranded when its service territory opens to retail  
27 competition.

1 First, Citizens decided to cancel the APS Power Purchase Agreement, even  
2 though doing so subjected it to potential cancellation costs of approximately  
3 \$1.85 million.<sup>1</sup> This amount was far less than the potentially stranded costs  
4 (estimated to be \$6.7 million) that would likely occur if the facility were built as  
5 planned. Second, Citizens sold its rights-of-way and environmental permits  
6 associated with the northern portion of the planned transmission corridor to  
7 Griffith for \$1.5 million. Citizens retained the southern portion of the corridor for  
8 other transmission projects that may be needed to meet future customer  
9 requirements. In total, this action by Citizens eliminated approximately \$2.1  
10 million of potentially stranded transmission-related investment. In the  
11 aggregate, this action by Citizens reduced its potentially stranded costs by nearly  
12 \$9 million.

## 13 **2. Recent Contract Negotiations**

14 In 1998, Citizens also pursued contract discussions with APS focusing on  
15 the pricing and terms of the PSA and its Service Schedules. The initial focus  
16 concerned the base load portion of the PSA, Schedule A, and ultimately led to a  
17 reduction in Schedule A's demand charges. The Stipulation of Charges under  
18 Service Schedule A to the PSA, as negotiated in January 1995, included a  
19 provision that gave either party the right to make an application to the FERC,  
20 after May 31, 1998, to request modifications to Service Schedule A. More  
21 importantly, that provision included the limitation that: "...in the event of such  
22 application, APS shall not propose a composite charge greater than that which  
23 would result from the use of an embedded cost methodology based on the cost of  
24 APS' system." Accordingly, in early 1998, Citizens and APS commenced  
25 discussions about the charges under Service Schedule A and their relationship to  
26 APS' embedded cost. After several months of discussions and data analysis, the  
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29 <sup>1</sup> Ultimately, APS elected to retain rights to the combustion turbine associated with the Power Purchase Agreement for its own use and agreed to waive any cancellation costs.

1 parties agreed in early 1999 to lower the Schedule A charges retroactively, in  
2 four steps, beginning with August 1, 1998, and running through January 1, 2001.  
3 Through the entire period of the modified agreements ending April 30, 2002,  
4 these reductions were projected to save the AED's customers nearly \$13 million.

5 In May 1999, shortly after the negotiations that produced the Schedule A  
6 demand charge reductions was complete, Citizens was notified by APS of a billing  
7 error that had been made during the period January – November 1998, resulting  
8 in approximately \$4.3 million additional payments due. Due to the magnitude of  
9 this additional payment request, Citizens initiated an investigation into the  
10 underlying facts and circumstances, a process that began in summer 1999 and  
11 ensued for several months.

12 While that billing investigation was underway, Citizens was notified that  
13 APS, Pinnacle West Capital Corporation, and APS Energy Services Company  
14 (collectively "Pinnacle West Companies") intended to make a filing at the FERC  
15 containing, among other things, a request to modify the PSA with respect to the  
16 Price Ceiling and Minimum Rates provisions. The principal intent of the FERC  
17 filing was to seek approval for the Pinnacle West Companies to engage in inter-  
18 company, affiliated transactions at market-based rates. As part of this filing, the  
19 Pinnacle West Companies were required to address a concern that its wholesale  
20 customers, including Citizens, would not be adversely affected by potentially  
21 abusive inter-affiliate transactions. The part of the filing directly affecting the  
22 PSA, which was ultimately approved by FERC, effectively capped certain energy  
23 pricing components based on the Dow Jones Palo Verde Index ("PVI") prices.  
24 Under the former contract language, minimum pricing was tied to APS' system  
25 incremental cost ("SIC"). Under the new language, the minimum pricing for  
26 wholesale power transactions became the lesser of charges developed based on  
27 APS' SIC or the PVI prices.

1 In addition to discussions concerning the APS billing revision for 1998, and  
2 the pending market-based rate filing before the FERC, Citizens was also engaged  
3 in discussions with APS on modifying the PSA to accommodate retail open access.  
4 Key points under discussion included the procedure to disaggregate competitive  
5 retail load data from the total metered load billable to Citizens, in order to  
6 establish the cost to serve its Standard Offer customers, and the impact of the  
7 fixed 100 MW Contract Demand under Schedule A on Citizens' power costs, as  
8 existing retail load migrated to competitive suppliers.

9 Given the multitude of issues being addressed by the parties at the time,  
10 APS and Citizens sought to craft a comprehensive agreement that would settle all  
11 the key matters under discussion. In May 2000, the parties signed a  
12 Memorandum of Understanding to serve as the framework for a comprehensive  
13 settlement agreement. The general points of such an agreement would include:

- 14 • APS would refund \$1.5 million to settle outstanding billing issues;
- 15 • Citizens would not file a protest in the Pinnacle West Companies' FERC
- 16 filings and would withdraw its then-current intervention;
- 17 • The parties would alter the existing PSA to accommodate competitive
- 18 retail power deliveries;
- 19 • Citizens would be able to reduce the Schedule A Contract Demand, after
- 20 May 2002, based on net load loss resulting from retail competition; and
- 21 • The parties would restructure certain Service Schedules to the PSA and
- 22 tie pricing to 1999 actual power costs, indexed to the change in natural
- 23 gas prices.

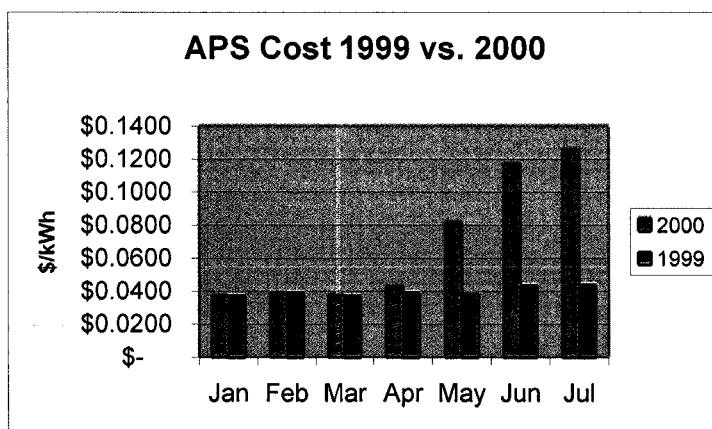
24 As a result of the uncertainty that has now arisen due to the unprecedented  
25 power supply cost increases reflected in the bills received from APS during the  
26 past three months, Citizens and APS have not yet finalized the comprehensive  
27 agreement, and it remains pending as of the date of this filing.

#### **IV. UNDERLYING CAUSES OF SUMMER 2000 POWER COST INCREASES**

This section of Citizens' application describes the substantial increase in power costs that Citizens has experienced this summer and discusses the underlying causes. As shown below, Citizens' costs for APS power deliveries for the May - July period have risen over 160% on a \$/kWh basis. Citizens believes the Summer 2000 power cost increases are attributable to the interplay of five key factors: (i) the significant increase in natural gas prices thus far in 2000; (ii) growing electric demands in the Western United States relative to existing generation resources; (iii) the impact of the deregulation of the wholesale power markets, especially in California; (iv) APS' power resource capability relative to its native load; and (v) the Minimum Rates provisions of the Citizens/APS Power Service Agreement and associated Service Schedules. The following discussion identifies the various factors that have contributed to substantial increases in the wholesale cost of power.

##### **A. Summary of Summer 2000 Power Cost Increases**

As of the preparation of this filing, Citizens had received bills from APS for power supplied through July 2000. The following chart illustrates, on a \$/kWh basis, the comparative charges from APS for 1999 versus 2000. As can be seen,



while prices for the months of January through April were comparable, those implicit in the APS bills for the months of May through July were approximately



1 100% to 150% higher in 2000 than 1999. The portion of the total amounts paid  
2 for power during May – July 2000 solely attributable to higher APS commodity  
3 costs this year exceeded \$27 million. Citizens is projecting that, for the entire  
4 Summer 2000 cooling period from May through September, the increased price  
5 for APS power deliveries will produce more than \$51 million higher power bills.  
6 To put this in perspective, the total APS power costs for all of 1999 were \$50.2  
7 million.

#### 8 **B. Increase in Natural Gas Prices**

9 Natural gas not only fuels a significant portion of APS' generation, but also  
10 fuels a sizeable portion of power plants operating throughout the western United  
11 States. Moreover, it is the fuel that will be used for essentially all planned  
12 generation facilities to be constructed in this region for the foreseeable future. In  
13 the summer of 1999, the commodity price for natural gas available to western  
14 generation facilities was typically in the range of \$2.50 – \$3.50 per million BTU.  
15 This summer, price levels have risen to the range of \$3.50 – \$5.00 per million  
16 BTU, a 30 – 50% increase. The generation resources used by APS to serve  
17 Citizens' peak-period loads in the summer of 2000 are in large part fueled by  
18 natural gas. However, as illustrated above, the 150%+ increases in Citizens'  
19 power costs cannot be solely attributed to the increase in natural gas prices, even  
20 if it was assumed that 100% of Citizens load was served with gas-fired  
21 generation.

#### 22 **C. Electric Supply Versus Demand in the West**

23 Much media attention has been focused this summer on the situation  
24 concerning the cost of electricity in California, and for good reason. With peak  
25 load requirements in the order of 50,000 MW, California represents  
26 approximately 40% of the entire U.S. portion of the Western Systems  
27 Coordinating Council's ("WSCC") peak demand. Due to its large size, the impact  
28 of system and market conditions in California reverberates throughout the  
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1 Western grid. While this summer's loads have revealed an overall imbalance  
2 between electric supply and demand throughout the WSCC, the situation in  
3 California has been the dominant factor.

4 On August 2, 2000, the California Electricity Oversight Board and Public  
5 Utilities Commission jointly submitted a report to the Governor's Office on the  
6 various power issues faced by the state, particularly the unprecedented increases  
7 in consumers' electric bills. Entitled "California's Electricity Options and  
8 Challenges," the report analyzes the circumstances giving rise to the  
9 curtailments, blackouts, and pricing problems facing California. Among the  
10 subject areas covered is the lag of electric capacity additions relative to load  
11 growth. Of the 55,500 MW of generation capacity on-line in California, only  
12 approximately 670 MW, or less than 2%, was added between 1996 and 1999.  
13 During the same time frame, peak load has grown by over 5,500 MW. The State  
14 currently requires power imports of an additional 8,000 MW to meet its peak  
15 requirements. As a consequence of the current gap between supply and demand  
16 in California, electric reliability was significantly compromised on several days  
17 during this summer. The California Independent System Operator ("CA-ISO")  
18 declared Stage Two Emergencies (operating reserves less than 5% of expected  
19 load) on 12 separate days this summer (through 8/17/00). On June 14, 2000,  
20 Pacific Gas & Electric was required to interrupt nearly 100,000 of its customers in  
21 the San Francisco Bay Area, an unprecedented event precipitated by high loads  
22 and short supply in that area.

23 Further, the squeeze on power supplies in California has caused massive  
24 increases in the price of electricity. Since 1995 and the deregulation of wholesale  
25 electric markets by FERC, the wholesale price of electricity has varied according  
26 to the fundamental economic principles of supply and demand. Until this  
27 summer, the traditional regulatory system served consumers well. As reported in  
28 California's Electricity Options and Challenges, this year, between June and  
29

1 August, wholesale prices for electricity in California increased on average 270%  
2 over the same period in 1999. Further, during a single week in June, purchasers  
3 of California power spent \$1.2 billion on electricity, an amount equal to 1/8 of  
4 their total cost of power in 1999.

5 As the dominant player in the western electric markets, the events in  
6 California spilled over into neighboring states. For instance, the weighted  
7 average price of firm on-peak electricity at the Dow Jones Palo Verde Index  
8 trading hub averaged \$.165/kWh, \$.150/kWh, and \$.222/kWh, for June, July,  
9 and August 2000, respectively and hit daily highs of \$.517/kWh, \$.334/kWh, and  
10 \$.519/kWh in those same periods. Such prices vastly exceed those experienced  
11 at the Palo Verde hub at any time in its history.

#### 12 **D. Deregulation of Wholesale Power Markets**

13 The extraordinary price levels experienced in western wholesale electricity  
14 markets during summer 2000 would not have occurred under traditional  
15 wholesale price regulation. Prior to the issuance of FERC Order 888 in 1995,  
16 which deregulated wholesale markets for electricity, rates for wholesale electric  
17 generation service were set and/or reviewed on the basis of the embedded cost  
18 of service. That is, an electric utility making wholesale power sales would be  
19 allowed to recover through rates its prudently incurred cost of providing service  
20 (expenses, taxes, labor costs, etc.) plus a fair rate of return on prudent  
21 investment in property, plant, equipment, materials and supplies. Such pricing  
22 was usually established in one of five forms:

- 23 1. **Average System Rate** – a rate that recovers average fixed costs of  
24 all generating units on the system in a demand charge and average  
25 system variable costs in an energy charge. This rate structure was  
commonly used in requirements contracts;
- 26 2. **Off-System Rate** – a rate that recovers the fixed costs of selected  
27 units most likely to provide the service in a demand charge and 100%  
28 - 110% of the incremental cost of the system (fuel and variable costs  
29 or purchased power costs) in an energy charge;

3. **Unit Sale Rate** – a rate that recovers fixed and variable costs of a particular generating unit through demand and energy charges;
4. **Total Revenue Constraint Rate** – a three-part rate with a ceiling price based on the fixed and variable costs of the most expensive unit on the system, a negotiated demand and energy charge, and a floor price equal to system incremental costs;
5. **Emergency Rate** – a rate equal to the higher of 110% of system incremental cost or a FERC-specified ceiling (\$30/MWh raised to \$100/MWh in the late 1980's).

FERC has required that all pricing forms except the Average System Rate utilize a "floor" (the allowed minimum price) equal to the system incremental costs, reflecting the fact that most fuel costs included volatile commodities, such as oil and gas. The use of a floor provided assurance that the seller would charge rates that would at least recover the incremental variable costs, and that the seller's other customers would not subsidize the sale through the operation of its fuel adjustment clause.

Accordingly, under cost-based rates, unless the seller owned an expensive nuclear unit, the highest rates would be the emergency energy rate of \$100/MWh or 110% of the seller's incremental costs. The incremental costs could include purchased power costs, since typically a utility would only purchase power if that were less expensive than operating one of its more expensive generating units or constructing a new unit. Under FERC policy, however, a utility may only recoup 100% of the purchased power costs incurred plus an adder equal to one mill/kWh. This limitation insured that power was not sold and then resold to increase the rate that could be charged for the power. Moreover, the FERC required a fixed, rather than a percent, adder to reflect the fact that the utility's costs of negotiating a power purchase should be independent of the price. Under the traditional regulatory paradigm, utilities normally provided for sufficient long-term capacity, either owned or purchased, to meet their peak load and reserve

1 requirements, including wholesale sales. Accordingly, utilities normally purchased  
2 power only when it was economical or in emergencies, such as during the loss of  
3 a large generating unit.

4 The advent of the deregulation of wholesale electricity markets brought two  
5 significant changes to the functioning of the industry. First, the cost-basis  
6 approach to pricing wholesale sales was no longer applicable; as long as a utility  
7 could demonstrate to FERC that it did not have inordinate market power, it could  
8 sell power at prices dictated by what the market would bear. The key underlying  
9 assumption is that the market will discipline wholesale prices. Second, utilities  
10 began reducing their reliance on their own generation and began buying power  
11 from other utilities or markets rather than building their own units and incurring  
12 the additional risk of potentially unrecoverable costs.

13 The runaway electric prices that occurred in California wholesale electric  
14 markets and spilled over into adjoining regions during the summer of 2000 were  
15 made possible in part because of the wholesale electricity deregulation. This  
16 summer's events have led the FERC and various California State agencies to  
17 investigate the underlying causes, although they may not be fully understood for  
18 some time. However, the California's Electricity Options and Challenges report  
19 suggests that the rules directing the California wholesale market are in fact  
20 flawed and that market participants are able to game the system to their benefit  
21 even while obeying the rules.

22 Currently, California law requires that utilities serving the vast majority of  
23 California customers purchase all their power requirements through the CA-ISO  
24 and California Power Exchange ("PX"). In simplified terms, the PX conducts a  
25 day-ahead auction among participating generators and buyers for the hourly  
26 supply of electricity to meet California's electric demands. The PX sets the hourly  
27 price to be paid to all sellers at the highest price bid for that hour. During the  
28 following day, the CA-ISO, which controls the transmission system, directs the  
29

1 flow of electricity throughout the state. If the power supply purchased in the PX  
2 is not sufficient to meet electric demand, the CA-ISO makes up the difference by  
3 purchasing additional electricity to balance the load and meet reserve levels. This  
4 latter market operated by the CA-ISO is known as the "Ancillary Services Market"  
5 and consists of a number of generation products that enable the CA-ISO to  
6 instantaneously balance supply with load.

7 While the CA-ISO has implemented certain pricing caps, its mission to  
8 maintain the electric system is not generally constrained by the cost of power,  
9 and its real-time markets often command very high prices for the electricity that  
10 is needed immediately to keep the system operating. Among other suggestions  
11 about market participant behavior, the California Report suggests that sellers  
12 may have been withholding power from the day-ahead PX market in order to  
13 drive up prices in the CA-ISO real-time markets, particularly the "Replacement  
14 Reserves" market.

15 While all the facts are not yet in, it appears that the deregulation of  
16 wholesale electricity markets in conjunction with potentially flawed market rules  
17 in California have been key factors underlying this summer's skyrocketing power  
18 prices.

#### 19 **E. APS' Load/Resource Balance**

20 As identified previously, one consequence of the deregulation of wholesale  
21 electricity markets has been heightened concern about potential stranded costs  
22 that has in turn discouraged utilities from building new generation to meet their  
23 load and reserve requirements. Instead utilities are becoming increasingly reliant  
24 on power purchases in the wholesale market to meet their needs. This response  
25 has in part led to the current gap between supply and demand existing in the  
26 western grid. It appears that, instead of maintaining the system generation that  
27 has traditionally supported its service to Citizens, APS has also switched to the  
28 wholesale markets. Consequently, because the Citizens/APS contract is based on  
29

1 APS system incremental resources, during the summer months (with demand at  
2 highest levels) APS served a significant portion of the AED's load from short-term  
3 or spot purchases made in the competitive markets. These were the very power  
4 resources that experienced this summer's unprecedented price run-ups.

5 **F. Contract Pricing Provisions**

6 The APS/Citizens PSA and associated Service Schedules are of the basic  
7 form of a Total Revenue Constraint Rate, as described in the section above on the  
8 Deregulation of Wholesale Electricity Markets (however, certain elements are  
9 based on average system cost). That is, the contracts consist of three key  
10 elements: a price ceiling, based on the fixed and variable costs of the most  
11 expensive unit on the system (the Palo Verde Nuclear Station and other APS  
12 resources); a negotiated demand and energy charge; and a floor price equal to  
13 system incremental costs. These elements of the contracts are set forth in the  
14 current Service Schedules A, B, & C, as summarized below:

15 **Service Schedule A:**

16 Citizens purchases 104 MW under a system average rate form:

17 **Customer Charge:** \$523/Month

18 **Demand Charge:** \$14.75/kW-Month

19 **Energy Charge:** \$.01676/kWh

20 Citizens also purchases additional off-peak energy at a rate of  
21 \$.01676/kWh plus a 15% adder, or APS' system incremental cost plus a  
22 .0015/kWh adder, whichever is higher.

23 **APS' System Incremental Cost** is defined as:

24 The higher of either the incremental fuel cost of the station  
25 or unit from which energy is obtained, estimated over the  
26 applicable range of output as dispatched; or the cost of  
27 any purchased power occurring simultaneously with sales  
28 under this Service Agreement which were made for  
29 economic purposes and would not otherwise be needed to  
effect transactions under this service agreement. In

1 addition, there is the cost to start up additional units and  
2 other incremental costs such as incremental maintenance,  
third party transmission, taxes, etc.

3 **Service Schedule B:**

4 Citizens purchases on-peak energy above the Schedule A deliveries, but  
5 below Schedule C deliveries, under Schedule B:

6 **Demand Charge:** \$4/kW-Month

7 **Energy Charge:** the lower of 115% of APS' system incremental  
8 costs, 115% of current market price, or the cost of purchased power.

9 **Service Schedule C:**

10 Citizens installed combustion turbines ("CTs") near Nogales to enhance  
11 system reliability; it receives a capacity credit equal to 85% of the  
12 continuous output capacity of the CTs. Citizens pays:

13 **Customer Charge:** \$1000.00 per month

14 **Fuel Charge:** 120% of APS' highest hourly incremental fuel or  
15 purchased power costs for the day times the energy provided by APS

16 **O&M Charge:** Based on the O&M costs of APS' CTs

17 The Minimum Charge is the sum of the Customer Charge and O&M Charge.

18 **G. Ceiling and Floor Provisions**

19 All power delivered by APS to Citizens under Schedules A, B, and C is  
20 subject to separate ceiling and floor provisions capping the rate at the total  
21 revenue constraint rate based on Palo Verde Unit 3 and other APS resources. In  
22 addition to the rates in Schedules A, B, and C above and the ceiling rates, there is  
23 also a floor equal rate to 100% of APS' system incremental costs.

24 While the term "system incremental costs" is defined as previously  
25 described, the "floor" contains a statement that Citizens is responsible for  
26 purchased power costs and for any other costs incurred by APS in fulfilling its  
27 obligations for providing power under Schedules A, B, and C. Therefore, it



appears that if the floor is to be equal to system incremental costs, it would include all purchases, rather than only the economic purchases provided for in the definition of system incremental costs previously identified.

Citizens' bills from APS for May, June, and July 2000 have invoked the floor and ceiling provisions of the contract for billings under most Service Schedules.

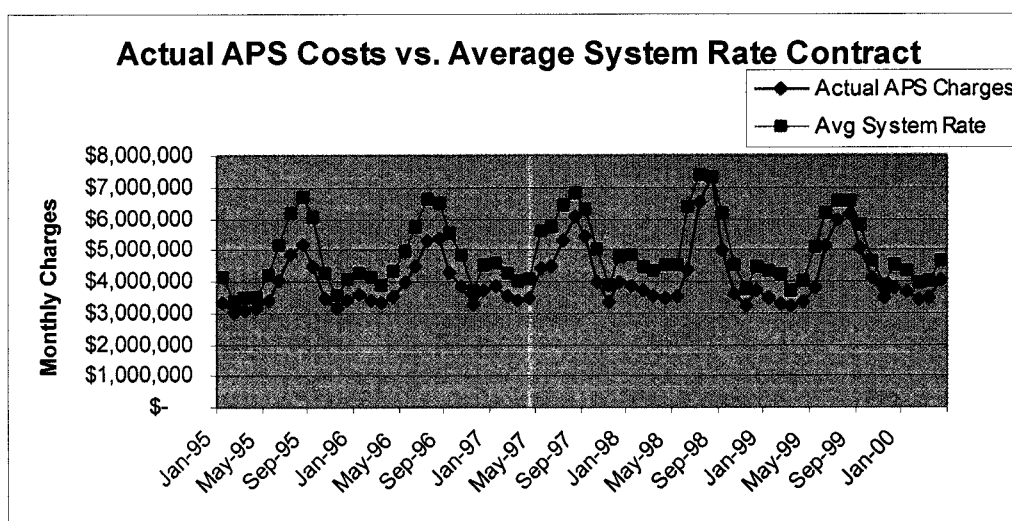
The following table illustrates the impact on Citizens of these billing provisions:

Month/Sch	Normal Chg.	Ceiling Invoked	Floor Invoked	Difference
<b>May 2000</b>				
Sch. A	\$3,542,372		\$5,378,793	\$1,836,421
Sch B	\$3,631,954			N/A
Sch C	\$ 491,939			N/A
<b>June 2000</b>				
Sch. A	\$4,109,774		\$7,240,006	\$3,130,232
Sch B	\$7,000,551		\$7,581,611	\$ 581,060
Sch C	\$1,682,575	\$1,259,174		\$ (423,401)
<b>July 2000</b>				
Sch. A	\$2,831,345		\$8,978,311	\$6,146,966
Sch B	\$5,127,479		\$8,300,996	\$3,173,517
Sch C	\$1,543,369		\$2,719,541	\$1,176,172
<b>Period Total</b>	<b>\$29,961,358</b>	<b>\$1,259,174</b>	<b>\$40,199,258</b>	<b>\$15,620,967</b>

The implication here is that, while prices this summer were very high under normal billing rates, the imposition of the ceiling and floor pricing provisions increased them even further, adding an additional \$15.6 million to the total charges for May through July. Such additional charges result from the floor pricing that includes all purchases, not just economic purchases, as is the case under the normal rate calculations.

It is clear that the Citizens/APS contract has provided stable and economic rates to Citizens' customers up to the summer of 2000. Notwithstanding the above analysis, Citizens' customers have received electric bills reflecting the large savings historically associated with Schedules A, B, & C, as a result of purchasing power at APS' system incremental costs, as compared to what would have occurred had all power purchases been under an Average System Rate contract.

1 The comparative costs for the two types of contracts can be demonstrated by  
2 comparing actual billings to the charges that would have been billed if all energy  
3 and demand were priced under Schedule A rates, reflecting APS' average system  
4 costs. For the period January 1995 – April 2000 (the period of the current  
5 contract to date), the savings to Citizens from having secured an incremental-  
6 cost versus an average system cost agreement with APS are positive for every  
7 billing month as illustrated in the graph below.



17 A similar comparison for the summer 2000 would not show a result this  
18 favorable. Nevertheless, since the signing of the current system-incremental-  
19 cost contract in 1995 through the beginning of this summer, Citizens has saved  
20 approximately \$43 million in power supply costs, as compared with pricing under  
21 an average system cost contract with APS.

22 The summer of 2000 brought with it unprecedented prices for wholesale  
23 power in the Western grid that resulted from significant increases in the cost of  
24 natural gas, a shortage of generation supplies relative to electric demands, and a  
25 deregulated wholesale marketplace exacerbated by potentially flawed rules in the  
26 California electric market, the most significant factor influencing the WSCC. Such  
27 high power prices affected Citizens as a result of its APS contract based on  
28 system incremental costs and APS' increasing reliance on market purchases to  
29 meet its native load requirements. The APS contract has historically served

1 Citizens well over the years with economical power prices and a regulated  
2 environment, but as a result of the dramatic changes occurring in the  
3 restructured electric industry, it may no longer be a viable source of power for  
4 Citizens' customers.

5 **V. REVIEW OF APS BILLS**

6 To insure that Citizens has been properly billed for power from APS,  
7 Citizens has initiated an in-depth analysis of all relevant billing data, of the  
8 procedures used for computing charges reflected on the APS bills received this  
9 summer, and of the generation resources used to serve Citizens' load. The  
10 principal objectives of the inquiry are to definitively establish that all charges are  
11 in accordance with the APS PSA, to ascertain clearly the reasons why the bills are  
12 significantly higher this summer, and to ensure that the resources employed by  
13 APS to serve the AED were the least cost available. The initial scope of the  
14 analysis included the months of May and June 2000. The review will ultimately  
15 include a thorough analysis of each hour of each month of the summer billing  
16 periods to evaluate the underlying components of the bill calculation.

17 Citizens' investigation of the APS data is being undertaken in three phases.  
18 Phase I, already complete, entailed a reconciliation of data obtained from various  
19 APS electronic and manual entry sources in order to establish a preliminary  
20 determination with respect to the probable causes of the higher-than-expected  
21 power bills, to minimize the data accumulation requirements imposed on APS,  
22 and to enable Citizens to become more rapidly focused in its analysis of the data.  
23 From the APS data acquired and reviewed thus far, Citizens has already created a  
24 dispatching hierarchy analysis determining which APS resources (owned and  
25 purchased) were used to meet total load, including that of Citizens, and sales to  
26 other parties. The data includes APS' manual and electronic pricing logs for sales  
27 and purchases, the dates the sales and purchases were entered into, unit  
28 availability and performance characteristics, day-ahead load estimates and actual  
29

1 loads, reserve requirements, and any transfers between the APS load desk and  
2 the APS marketing desk. The results of Phase I indicate that APS' calculations of  
3 the costs of its own units did not differ materially from Citizens' calculations, and  
4 that APS was in fact required to purchase energy to meet its peak load on the  
5 two days of highest usage. Under the rate provisions of the contract, the  
6 reliability purchases should not be included in the calculation of the rate, but may  
7 be includable in the floor calculation. Citizens reviewed the purchase and sale  
8 data, including transfers of purchases and sales between the load and marketing  
9 desks of APS to determine if the transfers were done at market. Also included in  
10 the scope of the review were APS' details of the calculation of the rate, ceiling  
11 and floor under the contracts.

12 Phase II will involve the remaining days of the summer period and will  
13 focus on APS' purchases and sales and transfers between its load and marketing  
14 desk. Also, daily resource dispatching data will be prepared in order to determine  
15 the need for the purchases and to verify sale prices. It is contemplated that  
16 Phase II, while encompassing considerable data, can be completed within a short  
17 time after receipt of the data from APS. At the completion of Phase II, Citizens  
18 will request a meeting with APS to discuss the results of its analyses and to  
19 request explanations concerning any contract inconsistencies or other differences  
20 revealed in the audit. At the conclusion of its investigation of the power bills and  
21 meetings with APS, Citizens will share the results with the Commission Staff.

22 In Phase III of the audit process, Citizens will investigate the extent to  
23 which APS practiced due diligence in the acquisition of resources that served  
24 Citizens' load during the summer of 2000. This inquiry will seek to determine  
25 whether APS resource procurement strategy resulted in the lowest reasonable  
26 cost to Citizens. As confirmed by APS in a recent filing at FERC, APS no longer  
27 owns sufficient generation to meet its peak load, and therefore APS must  
28 purchase power during peak periods to meet its load requirements. As APS  
29

1 stated in its Protest in FERC Docket No. ER00-3312-000 at page 5 (September 5,  
2 2000): "During peak hours, APS is a net importer of power and energy; it does  
3 not own sufficient generation to serve all of its wholesale and retail load  
4 obligations during these periods." As a result, APS is exposed to market prices  
5 for the portion of its load that exceeds its owned generation and longer-term  
6 purchases (as opposed to short-term or spot purchases).

7 Why APS did not construct additional generation, or enter into longer-term  
8 purchases, to cover the portion of its load that exceeds its owned generation is  
9 unknown. The DOE "Electric Utility Restructuring Weekly Update" for August 18,  
10 2000, explains that APS had a 300 percent wholesale rate increase (citing the  
11 August 16, 2000, "Public Power Daily"). Phase III of the audit process will review  
12 this matter.

13 The standard for the Phase III review will be based on the forecasted short-  
14 term purchase prices and the longer-term purchase prices during the periods  
15 prior to the high market prices incurred by APS, and seek to determine what a  
16 reasonable person, after appropriate analysis of the data then available, would  
17 have concluded. Accordingly, the review of APS' prudence not to cover (own  
18 generation or enter in to longer-term purchases) all of its load will require a  
19 review of its purchase power procurement practices over the last few years.  
20 Such a review will consider: data on purchases and market data that APS relied  
21 upon in deciding what portion of its load would be covered in the short-term or  
22 spot market, and what portion would be covered in longer-term purchases or  
23 owned generation; whether APS' purchased power procurement practices met  
24 NERC reliability requirements; and whether APS' procurement practices for its  
25 marketing desk differed from that of the load desk.

1 **VI. CITIZENS' PROPOSAL**

2 As stated, the power-supply costs experienced by the AED in recent months  
3 are unprecedented. The traditional operation of the PPFAC mechanism to recover  
4 the shortfall between the APS power bills and the power cost component in basic-  
5 service rates would require a substantial increase in customer rates. Citizens  
6 believes that unprecedented cost increases in this instance are best addressed  
7 with non-traditional solutions. The comprehensive plan being proposed has both  
8 rate and non-rate elements, and was developed with the principal objectives of  
9 striking a proper balance between preserving Citizens' opportunity to recover its  
10 cost of providing power while mitigating the impact on current customers. The  
11 elements of this proposal are fully integrated, and any significant alteration may  
12 substantially and adversely impact the opportunity to achieve these objectives.

13 The remainder of this application sets forth the details of Citizens' proposed  
14 initiatives.

15 **VII. RATE INITIATIVES**

16 Under the traditional operation of the PPFAC, as demonstrated on Exhibit  
17 No. 4, Citizens would be requesting the implementation of a PPFAC factor of more  
18 than seven cents-per-kWh for its AED customers. Citizens believes that such an  
19 increase is not a desirable option at this time. Presently, as shown on Exhibit No.  
20 6, except for two co-ops, Citizens' residential rates are the lowest among all  
21 electric utilities in the State of Arizona. Citizens intends to do everything it can to  
22 maintain affordable electric rates for all its customers.

23 In considering the various alternatives that might be used in connection  
24 with the substantial under-recovery of power costs incurred this summer, Citizens  
25 evaluated the current PGA mechanism. As previously stated, the most recent  
26 indication of the Commission's preference concerning the use of commodity cost  
27 pass-through rate adjustment mechanisms is its 1998 decision in the generic PGA  
28 proceeding. The Commission appropriately recognized that Federal wholesale  
29

1 deregulation has already caused volatility in the price of natural gas. To better  
2 stabilize rates, the Commission ordered the LDCs to use a twelve-month rolling  
3 average cost of gas, and recognized the feasibility of their using alternative gas  
4 procurement risk management techniques. The PGA decision also recognized  
5 that there is indeed an economic cost associated with the carrying of under-  
6 recovered or over-recovered balances in the PGA Bank.

7         The PGA decision provides useful guidance, but does not go far enough to  
8 address the unprecedented run-up in Citizens' wholesale electric rates. If the  
9 Commission approved a PPFAC mechanism for its AED identical to that which is  
10 now used for the PGA, an immediate change in the per-kWh adjustor factor to a  
11 rate exceeding four cents would be required, as indicated on Exhibit No. 5.  
12 Citizens prefers not to request such an increase at this time. Instead, it is  
13 requesting a change to the current PPFAC methodology to incorporate some of  
14 the features of the new PGA mechanism, but that would also produce for the time  
15 being, an adjustment rate that is more affordable for its customers.

16         Specifically, Citizens is requesting Commission approval to amend its  
17 existing PPFAC procedure to incorporate the following features:

- 18         • Terminating the current (0.553) cent-per-kWh PPFAC factor;
- 19         • Freezing the existing PPFAC Bank balance as of September 30, 2000,  
20         with recovery via a fixed PPFAC surcharge over a period of three years;
- 21         • Creating a new PPFAC Bank and adjustment factor with power supply  
22         costs based on a phased in, rolling 12-month average;
- 23         • Implementing a monthly accrual of carrying charges on the over or  
24         under-recovered PPFAC bank balances, based on a six percent rate of  
25         interest, compounded annually; and
- 26         • Introducing the use of energy risk management techniques and  
27         identification of the standards that would apply in establishing the  
28         prudence of such acts for cost recovery purposes.

1 To produce a lower fixed surcharge rate for recovering the balance of the  
2 frozen PPFAC Bank than that indicated on Exhibit No. 5, Citizens is requesting an  
3 alternative amortization period of three years, as presented on Exhibit No. 7.  
4 The Exhibit reflects actual APS power bills through July; it will be updated as the  
5 actual bills for August and September are received. As indicated on the Exhibit,  
6 the required per-kWh surcharge to extinguish the frozen PPFAC Bank is  
7 approximately 1.47 cents. The PPFAC factor for the new Bank ranges from 0.165  
8 to 0.666 cents-per-kWh through the month of May 2001, producing an average  
9 total combined PPFAC factor of approximately 1.77 cents per-kWh during that  
10 period. Based on current annual average monthly electric consumption of  
11 residential customers in Nogales, Kingman, and Lake Havasu City, the average  
12 monthly increase would be \$11.31, \$11.03, and \$17.08, respectively.

13 Two departures from the current PGA procedure implicit in the proposed  
14 PPFAC mechanism being requested by Citizens are the carrying charge rate and  
15 the carrying charge base. Both departures reduce the amounts to be ultimately  
16 paid by customers, vis-a-vis the PGA interest accrual methodology. First, the  
17 PGA mechanism allows the monthly accrual of interest on the Bank balance using  
18 the 90-day non-financial commercial paper rate reported by the Federal Reserve  
19 Bank. That rate is currently about 6.50%. For its proposed PPFAC mechanism,  
20 Citizens is requesting to use the standard 6% customer deposit interest rate for  
21 accruing carrying charges. Not only is that less than the current PGA interest  
22 rate, but it is also substantially less than the more longer term interest rates that  
23 would typically apply to the financing of a three-year investment.

24 The second departure from the current PGA procedure is the base upon  
25 which the interest accruals would be made. Under the PGA, interest is accrued  
26 on the month-end balance of the PGA Bank. In its proposed PPFAC procedure,  
27 Citizens intends to deduct the related balance of accumulated deferred income  
28  
29



1 taxes associated with the deferred costs, before applying the carrying charge  
2 rate. This will reduce interest accruals by approximately 40%, as compared with  
3 the strict application of the PGA methodology.

4 Under the existing PGA mechanism, the rate adjustment factor can change  
5 monthly, subject to a change limit of seven cents per therm over any consecutive  
6 twelve-month time period. For Citizens' Northern Arizona Gas Division, seven  
7 cents represents approximately 28% of the cost of gas component in basic  
8 service rates. Given the current power supply cost in basic electric service rates  
9 of approximately 5.2 cents, a comparable change limit would be approximately  
10 1.45 cents.

11 Another feature of the existing PGA mechanism is a Bank balance over or  
12 under-recovered trigger point which, when exceeded, requires Citizens to meet  
13 with Commission Staff to discuss what adjustment factor changes are warranted,  
14 if any. For Citizens Northern Arizona Gas Division, that amount was established  
15 at \$4.2 million dollars. As previously stated, the existing threshold for Citizens'  
16 existing PPFAC is \$2.6 million. At a time when projected power supply cost  
17 deferrals exceed previous annual purchased power expense levels, a new trigger  
18 point clearly needs to be established.

19 Citizens respectfully requests approval in this filing of the ability to charge  
20 the monthly combined PPFAC factor for both Banks, based on actual power supply  
21 costs without limit during the next twelve months, with a commitment to make  
22 an application to revisit, true-up, and otherwise reconsider all the elements of its  
23 requested new PPFAC mechanism at the end of that period.

#### 24 **VIII. Energy Price Risk Management Initiatives**

25 With the deregulation of the generation segment of the electric utility  
26 industry, the energy price risks borne by utilities and their customers are  
27 changing. Variations in the supply and demand for electricity, combined with the  
28 recent significant increase in the price of natural gas, creates significant  
29

1 uncertainty regarding short and long-term prices. Historically, the industry has  
2 managed its price risks through long-term power supply contracts and cost-based  
3 economic regulation. As the industry changes, it is now necessary to explore  
4 other risk management tools. Utilities need to take a hard look at the  
5 alternatives available to effectively manage price risks and meet the demands of  
6 their customers.

7       Without a significant narrowing of the gap currently existing between  
8 available generation capacity and increasing customer demands for electricity in  
9 this region of the country, and some relief from the higher natural gas prices, the  
10 electric price spikes experienced this summer will likely return again next  
11 summer, and for the foreseeable future. With that in mind, Citizens is very  
12 carefully exploring ways that it may effectively manage its energy price risks.  
13 That includes fully considering all legal and regulatory avenues available with  
14 respect to the current APS PSA. It also includes identifying other power supply  
15 options and various hedging tools that may be available.

16       Risk management instruments are emerging in response to the  
17 deregulation of electric generation and resulting in changing power supply market  
18 conditions experienced in recent years. A well-founded energy risk management  
19 program can benefit both a utility and its customers. It can create greater rate  
20 stability and lower rates than might otherwise occur.

21       The principal objective of an energy risk management program should be to  
22 strike a proper balance between risk mitigation and risk taking. A key element of  
23 risk management is the use of derivative instruments for price hedging purposes.  
24 A derivative is a financial instrument that derives its value from the value of other  
25 financial instruments or an underlying asset such as a commodity, futures  
26 contract, stock, bond, currency, index, or interest rate. The main use of  
27 derivatives in risk management is to protect assets against price volatility.  
28 Among the types of derivatives appearing in the electric industry are privately  
29

1 negotiated forward contracts, standardized futures contracts traded on an  
2 exchange, swaps, and options. Derivatives can be a good hedge against the type  
3 of electric price risk being experienced this summer.

4 A key consideration in Citizens' willingness to defer the existing Bank for a  
5 period substantially longer than the traditional recovery period is its strong belief  
6 that it does have legal and regulatory options in connection with the APS PSA,  
7 and that it can, with Commission approval, successfully manage its electric price  
8 risk through the use of hedging instruments. As part of this application, Citizens  
9 asks approval to implement an energy price risk management program, a key  
10 element of which is the use of derivatives. Citizens specifically asks for guidance  
11 concerning the standards that would be imposed on Citizens at such time as it  
12 seeks recovery of the costs incurred in connection with such program. In  
13 particular, Citizens seeks guidance from the Commission on the following key  
14 questions:

- 15 • Under what circumstances is the use of price hedging warranted?
- 16 • How should utilities weigh the value of price uncertainty?
- 17 • Should hedged energy pricing be applied to all customers or only to
- 18 those who select the option?
- 19 • What limits should be imposed on ratepayer exposure to risk from
- 20 hedging activities?
- 21 • What standards and criteria will be applied in judging the prudence of
- 22 utility hedging decisions (or decisions not to hedge)?
- 23 • What filing requirements, if any, should apply for utility risk
- 24 management plans?
- 25 • What reporting should be instituted?
- 26 • Should hedging costs be recovered through the PPFAC or through base
- 27 rates?
- 28
- 29

1 **IX. NON-RATE INITIATIVES**

2 **A. Customer Initiatives**

3 Recognizing the potentially significant impact of recovery of the PPFA  
4 balance on its customers, Citizens has planned initiatives in communications,  
5 demand-side management, and payment terms and arrangements to assist  
6 customers to handle and potentially mitigate the pending electric bill increases.

7 The current plans for these initiatives are described in the following  
8 subsections.

9 **1. Communications**

10 Citizens' plan addresses three key areas:

- 11 • **Regular Status Reporting:** Keeping customers, media,  
12 community leaders, and employees informed about the  
13 status of the situation and key developments associated with  
14 Citizens' filing to request recovery of its uncollected  
purchases power costs.
- 15 • **Ensuring Accurate Information:** Addressing and  
16 clarifying any misunderstandings or customer confusion  
17 regarding Citizens' electric operations and the manner in  
which the AED purchases electric power.
- 18 • **Program Support:** Providing ongoing support to energy-  
19 savings programs and other payment-focused customer  
20 assistance initiatives.

21 To accomplish these goals, Citizens has allocated the human and monetary  
22 resources needed to move forward on a number of communications fronts. The  
23 following table indicates the principal types of communications Citizens is  
24 planning to employ for each of these communications goals.

Form of Communications	Regular Status Reporting	Ensuring Accurate Information	Program Support
Press Releases	✓	✓	✓
Press Conferences	✓		
Customer Service Training	✓		
Employee Meetings	✓		
Targeted Communications: Key Customers/Community Leaders/Low Income Agencies	✓		✓
Customer Information Mat'ls (e.g. Newsletter, Bill Insert)	✓		
Speakers' Bureau for Service Clubs	✓		
Updated Web Site	✓	✓	✓
Newspaper Advertising		✓	✓
Radio Advertising		✓	✓
Personal Visits: Key Customers/Community Leaders		✓	
Radio PSA Spots and Talk Show Participation			✓

## 2. Demand-Side Management Initiatives

Citizens is planning a broad spectrum of energy efficiency measures and education to address the needs of all classes of customers. The central goal of these efforts is to aggressively move forward to help customers in identifying energy efficiency opportunities that will reduce customer bills and help moderate energy demand during the peak summer months of 2001. The current plan calls for an overarching DSM effort and focused programs for residential and non-residential customers, as described below.

### • Overall DSM Elements

**Web-Site Enhancements** - Citizens plans to update its Web site to include an expanded energy efficiency section featuring:

- Appliance Energy Calculator with associated efficiency recommendations;
- New appliance purchase energy considerations;
- On-line energy self audits; and

- 1                   ➤ Residential and Commercial new construction energy  
2                   efficiency considerations.

3                   **Peak-Season DSM Programs** - An initial high-level screening  
4 of long-term peak reduction programs will be evaluated. After the  
5 initial screening, a short list of preferred options will be selected by  
6 Citizens' management. These remaining options will be thoroughly  
7 evaluated for the purpose of developing new programs, the approval  
8 of which will be sought from the Commission Staff.

9                   **Renewable Resource Options** – On-site customer options for  
10 renewable electric generation will receive priority focus in Citizens'  
11 evaluation and development of its plan to meet the Commission's  
12 Environmentally-Friendly Portfolio Standard requirements.

13                   •     **Residential DSM Initiatives**

- 14                   ➤ A packet of energy conservation materials has been  
15 compiled for residential customers and is being offered  
16 upon request.
- 17                   ➤ An on-line and/or mail-in energy audit program with  
18 energy efficiency recommendations will be developed for  
19 customers to perform self-audits.
- 20                   ➤ A mail order offering of energy efficiency lighting products  
21 will be implemented. Allowing customer "on-the-bill"  
22 billing is under consideration.
- 23                   ➤ The Good Cents residential New Construction program will  
24 continue, but is being evaluated to determine the  
25 feasibility of including a special rating for homes that  
26 utilize renewable resources.
- 27                   ➤ A limited-time targeted incentive program will be offered  
28 for upgrades to high efficiency air conditioning units.  
29

1                   •     **Commercial DSM Initiatives**

- 2                   ➤     A detailed book of energy conservation measures
- 3                         developed specifically for Commercial Customers is
- 4                         available upon request. A summary of the "low-cost, no-
- 5                         cost" measures with the greatest potential impact will be
- 6                         developed and included in future mailings to Commercial
- 7                         Customers.
- 8                   ➤     Over 600 commercial customer facilities were audited in
- 9                         the 1994-1997 time period. Recommendations made to
- 10                        the customers at the time of the audit may not have been
- 11                        implemented. The original audit reports will be provided
- 12                        to the customer again with a cover letter quantifying the
- 13                        potential savings computed at Citizens' current rates.
- 14                   ➤     Three levels of commercial auditors will be available to
- 15                         evaluate and make energy efficiency recommendations
- 16                         for commercial facilities. The level of the auditor's
- 17                         technical knowledge will be matched with the customer's
- 18                         needs at the time of a customer on-site audit request.
- 19                   ➤     Reference information to assist customers in working with
- 20                         performance contractors will be developed to provide the
- 21                         customers the ability to identify opportunities for
- 22                         alternative financing options with positive cash flow.
- 23                   ➤     Arrangement for an energy efficiency review of proposed
- 24                         expansion plans for several industrial customers.
- 25                   ➤     A packet of prescriptive measures for Commercial New
- 26                         Construction customers to consider will be developed for
- 27                         distribution by Citizens' Engineering Department.

28                   **3.     Customer Payment Terms and Arrangements**

29                   Citizens is planning a number of initiatives targeted toward assisting

30                   customers in paying the higher electric bills that will result from increased power

31                   costs. These initiatives fall in three areas: a) Enhanced and Expanded Payment

32                   Options; b) Existing Low-Income Programs; and c) New Low-Income Outreach

33                   Efforts.

1                               **a)    Enhanced and Expanded Payment Options**

2           Citizens is planning initiatives to both enhance the terms of existing  
3 payment options and to add new options. With respect to existing payment  
4 options, Citizens is considering the following actions:

5                       •    **Levelized Billing**

- 6                               ➤   expand communications efforts about the availability of  
7                                       Levelized Billing;  
8                               ➤   extend Levelized Billing to Small Commercial customers;  
9                               ➤   liberalize sign-up criteria by allowing up to 2 historical  
10                                      non-pay disconnects in 12-month period (current is 0  
  disconnects).

11                      •    **Payment Arrangement Flexibility**

- 12                             ➤   extend the time period between disconnect notice and  
13                                      actual disconnect as special circumstances dictate;  
14                             ➤   allow for monthly payments scheduled to coincide with  
15                                      the number and date of paychecks received by  
16                                      customers;  
17                             ➤   waive 1-1/2% late payment fees in special  
  circumstances; and  
  ➤   increase low-income agency referrals.

18                      •    **Credit Card Acceptance**

- 19                             ➤   Citizens is exploring with vendors the option of allowing  
20                                      credit card payment of bills for customers who agree to a  
21                                      nominal service fee.

22           By and large, these modifications of Citizens' payment options can be  
23 accomplished within the context of its existing Rules and Regulations tariff.  
24 However, in its current form, Citizens' tariff allows for Levelized Billing only for  
25 residential customers. Consequently, Citizens asks that the Commission provide  
26 specific authority to extend Levelized Billing services to small commercial  
27 customers for a period of 12 months, following the issuance of an order in this  
28 matter.



1                                   **b)    Existing Low-Income Programs**

2           Citizens' chief low-income assistance program is its CARES Residential tariff  
3 that provides bill discounts to qualifying low-income customers. Feedback from  
4 Citizens' frontline customer operations indicates that a number of eligible  
5 customers are not now taking advantage of the discounted rate. In preparation  
6 for the pending bill increases, Citizens plans to undertake a joint effort with the  
7 Low-Income Agencies to expand communications on the availability of the  
8 program to increase eligible customer participation.

9                                   **c)    New Low-Income Outreach Efforts**

10          In addition, Citizens will establish a low-income electricity assistance fund  
11 to supplement existing governmental programs and work with one or more  
12 agencies to administer distribution of funds to qualifying low-income residential  
13 customers. Citizens will direct \$100,000 to the fund, distributed in an equitable  
14 manner among its three operating districts. The administering agency will  
15 identify assistance candidates and track assistance to avoid duplicative payments.  
16 Citizens will credit customers' accounts on the basis of qualification forms  
17 received from the administering agency for disadvantaged customers. Citizens is  
18 now in the process of establishing agency relationships and the policies and  
19 criteria by which the funds will be distributed to customers. Citizens expects  
20 these arrangements to be finalized in concert with the implementation of the  
21 PPFAC adjustor resulting from this filing.

22 **X.    SUMMARY**

23          As described throughout this application, the AED is experiencing  
24 unprecedented increases in the cost of purchased power, that are beyond its  
25 control. Application of the traditional PPFAC mechanism would require a  
26 substantial increase in the current rate adjustment factor. Citizens does not  
27  
28  
29

1 believe that is in the best interest of our customers. Accordingly, Citizens is  
2 requesting a non-traditional solution to the current situation. Citizens respectfully  
3 requests Commission approval to:

- 4       • Cease immediately the current (0.553) cents-per-kWh factor;
- 5       • Freeze the existing PPFAC Bank as of September 30, 2000, and  
6       amortize over 36 months;
- 7       • Create a new PPFAC Bank as of October 1, 2000, based on a phased-  
8       in, rolling 12-month average cost of power;
- 9       • Accrue carrying charges on both Bank balances, net of related  
10      deterred income tax benefits, computed at a 6% interest rate;
- 11      • Charge a PPFAC factor each month based on the sum of the factor  
12      necessary to fully amortize the frozen Bank over 36 months, plus the  
13      factor for the new Bank based on the difference between the phased-  
14      in 12-month average cost of power supply and the 5.194 cents-per-  
15      kWh base cost of power supply;
- 16      • Approve Citizens' request to implement energy risk management  
17      incentives;
- 18      • Identify and establish the criteria by which the prudence of Citizens'  
19      energy risk management initiatives will be evaluated for cost recovery  
20      purposes. (Specifically, answer the questions asked in this filing.)
- 21      • Issue whatever approvals are needed in connection with Citizens'  
22      proposed billing initiatives:
  - 23          ➤ Allow customers to use credit cards;
  - 24          ➤ Expand eligibility for level pay to small commercial customers;
  - 25          ➤ Approve expanded DSM programs; and
  - 26          ➤ Relax late payment and service shut-off criteria.
- 27
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**Expedited Approval.** Due to the magnitude of power supply costs being proposed for deferral, plus the fact that the outcome of this application has significant implications for the AED and its customers as they prepare for the introduction of retail electric competition, Citizens respectfully requests that this application be considered on an expedited basis.

RESPECTFULLY SUBMITTED on September 28, 2000.

Craig G. Munk

Craig A. Marks  
Associate General Counsel  
Citizens Communications Company  
2901 N. Central Avenue, Suite 1660  
Phoenix, Arizona 85012

Original and ten copies filed this  
September 28, 2000, with:

Docket Control  
Arizona Corporation Commission  
1200 West Washington  
Phoenix, Arizona 85007

Copies of the foregoing mailed/delivered  
this September 28, 2000, to:

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Director, Utilities Division  
Arizona Corporation Commission  
1200 West Washington  
Phoenix, Arizona 85007

Jerry Rudibaugh  
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# EXHIBIT NO. 1

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**CITIZENS UTILITIES COMPANY  
ARIZONA ELECTRIC DIVISION  
PURCHASED POWER AND FUEL ADJUSTOR  
BANK BALANCE REPORT FA-1  
For the Month of May 2000**

Line No.

1	Ending Balance - Prior Month	(Over-collected)	\$ (2,202,722)
2	Jurisdictional Sales	85,650,223	
3	Actual Cost of Generated and Purchased Power	<u>9,818,131</u>	
4	Unit Cost of Power (\$/kWh) (line 3 / line 2)		0.114631
5	Authorized Base Cost of Power (\$/kWh)	0.051940	
6	Authorized Purchased Power Adjustor (\$/kWh)	<u>(0.005530)</u>	
7	Net Power Costs Billed Customers (\$/kWh) (line 5 + line 6)		<u>0.046410</u>
8	(Over) / Under-recovery of Power Supply Costs (\$/kWh) (line 4 - line 7)		<u>0.068221</u>
9	Net Increase / (Decrease) in Bank Balance (line 2 X line 8)		5,843,144
10	Adjustments to Bank Balance: Computational Roundings		<u>(40)</u>
11	Ending Bank Balance - Current Month (line 1 + line 9 + line 10)		<u>\$ 3,640,382</u>
			Under-collected

## EXHIBIT NO. 2

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**Arizona Electric Division**  
**Analysis of PPFAC Bank - Assuming No Change to Current Scheduled PPFAC Rates**

Month:	<u>May-00</u>	<u>Jun-00</u>	<u>Jul-00</u>	<u>Aug-00</u>	<u>Sep-00</u>	<u>Oct-00</u>	<u>Nov-00</u>
Beg. Balance	(2,202,700)	3,640,404	14,853,622	28,450,055	44,168,395	52,276,038	53,391,142
Power Supply Costs	9,818,131	16,430,792	19,492,731	21,566,000	13,106,000	5,361,619	4,666,197
Sales (kWh)	85,650,223	112,423,491	127,048,000	126,000,000	107,700,000	91,500,000	86,600,000
Recoveries:							
Base Rates @ \$.05194	4,448,673	5,839,276	6,598,873	6,544,440	5,593,938	4,752,510	4,498,004
PPFAC Factor	(0.00553)	(0.00553)	(0.00553)	(0.00553)	(0.00553)	(0.00553)	(0.00553)
PPFAC Recoveries	(473,646)	(621,702)	(702,575)	(696,780)	(595,581)	(505,995)	(478,898)
Total	3,975,027	5,217,574	5,896,298	5,847,660	4,998,357	4,246,515	4,019,106
Ending Balance	3,640,404	14,853,622	28,450,055	44,168,395	52,276,038	53,391,142	54,038,233



Month:	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01
Beg. Balance	54,038,233	54,258,364	54,378,258	55,044,686	55,215,382	56,016,395
Power Supply Costs	4,534,388	4,443,945	4,961,097	4,475,159	5,203,416	5,508,839
Sales (KWh)	88,100,000	88,300,000	87,700,000	87,900,000	89,900,000	97,800,000
Recoveries:						
Base Rates @ \$ .05194	4,575,914	4,586,302	4,555,138	4,565,526	4,669,406	5,079,732
PPFAC Factor	(0.00297)	(0.00297)	(0.00297)	(0.00297)	(0.00297)	(0.00297)
PPFAC Recoveries	(261,657)	(262,251)	(260,469)	(261,063)	(267,003)	(290,466)
Total	4,314,257	4,324,051	4,294,669	4,304,463	4,402,403	4,789,266
Ending Balance	54,258,364	54,378,258	55,044,686	55,215,382	56,016,395	56,735,968

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**Arizona Electric Division**  
**Analysis of PPFAC Bank - Assuming Suspension of Current PPFAC Factor**

Month:	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00
Beg. Balance	(2,202,700)	3,640,404	14,853,622	28,450,055	44,168,395	52,276,038	52,885,147
Power Supply Costs	9,818,131	16,430,792	19,492,731	21,566,000	13,106,000	5,361,619	4,666,197
Sales (kWh)	85,650,223	112,423,491	127,048,000	126,000,000	107,700,000	91,500,000	86,600,000
Recoveries:							
Base Rates @ \$.05194	4,448,673	5,839,276	6,598,873	6,544,440	5,593,938	4,752,510	4,498,004
PPFAC Factor	(0.00553)	(0.00553)	(0.00553)	(0.00553)	(0.00553)	-	-
PPFAC Recoveries	(473,646)	(621,702)	(702,575)	(696,780)	(595,581)	-	-
Total	3,975,027	5,217,574	5,896,298	5,847,660	4,998,357	4,752,510	4,498,004
Ending Balance	3,640,404	14,853,622	28,450,055	44,168,395	52,276,038	52,885,147	53,053,340

Month:	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01
Beg. Balance	53,053,340	53,011,814	52,869,457	53,275,416	53,185,049	53,719,059
Power Supply Costs	4,534,388	4,443,945	4,961,097	4,475,159	5,203,416	5,508,839
Sales (kWh)	88,100,000	88,300,000	87,700,000	87,900,000	89,900,000	97,800,000
Recoveries:						
Base Rates @ \$.05194	4,575,914	4,586,302	4,555,138	4,565,526	4,669,406	5,079,732
PPFAC Factor	-	-	-	-	-	-
PPFAC Recoveries	-	-	-	-	-	-
Total	4,575,914	4,586,302	4,555,138	4,565,526	4,669,406	5,079,732
Ending Balance	53,011,814	52,869,457	53,275,416	53,185,049	53,719,059	54,148,166

# EXHIBIT NO. 4

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**Arizona Electric Division**  
**Analysis of PPFAC Bank - Full Bank Recovery by May, 2001**

Month:	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00
Beg. Balance	(2,202,700)	3,640,404	14,853,622	28,450,055	44,168,395	52,276,038	45,983,302
Power Supply Costs	9,818,131	16,430,792	19,492,731	21,566,000	13,106,000	5,361,619	4,666,197
Sales (kVWh)	85,650,223	112,423,491	127,048,000	126,000,000	107,700,000	91,500,000	86,600,000
Recoveries:							
Base Rates @ \$.05194	4,448,673	5,839,276	6,598,873	6,544,440	5,593,938	4,752,510	4,498,004
PPFAC Factor	(0.00553)	(0.00553)	(0.00553)	(0.00553)	(0.00553)	0.07543	0.07543
PPFAC Recoveries	(473,646)	(621,702)	(702,575)	(696,780)	(595,581)	6,901,845	6,532,238
Total	3,975,027	5,217,574	5,896,298	5,847,660	4,998,357	11,654,355	11,030,242
Ending Balance	3,640,404	14,853,622	28,450,055	44,168,395	52,276,038	45,983,302	39,619,257

Month:	Dec-00	Jan-01	Feb-01	Mar-01	Apr-01	May-01
Beg. Balance	39,619,257	32,932,348	26,129,522	19,920,270	13,199,606	6,952,459
Power Supply Costs	4,534,388	4,443,945	4,961,097	4,475,159	5,203,416	5,508,839
Sales (kWh)	88,100,000	88,300,000	87,700,000	87,900,000	89,900,000	97,800,000
Recoveries:						
Base Rates @ \$.05194	4,575,914	4,586,302	4,555,138	4,565,526	4,669,406	5,079,732
PPFAC Factor	0.07543	0.07543	0.07543	0.07543	0.07543	0.07543
PPFAC Recoveries	6,645,383	6,660,469	6,615,211	6,630,297	6,781,157	7,377,054
Total	11,221,297	11,246,771	11,170,349	11,195,823	11,450,563	12,456,786
Ending Balance	32,932,348	26,129,522	19,920,270	13,199,606	6,952,459	4,512

# EXHIBIT NO. 5

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Arizona Electric Division  
Analysis of PPFAC Banks - PGA Method

Month:	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00	Dec-00	Jan-01	Feb-01
<b>Existing Bank:</b>										
Beg. Balance	(2,202,700)	3,640,404	14,853,622	28,450,055	44,168,395	52,276,038	47,889,528	43,737,924	39,514,410	35,281,308
Power Supply Costs	9,818,131	16,430,792	19,492,731	21,566,000	13,106,000	-	-	-	-	-
Sales (kWh)	85,650,223	112,423,491	127,048,000	126,000,000	107,700,000	91,500,000	86,600,000	88,100,000	88,300,000	87,700,000
Recoveries:										
Base Rates @ \$.05194	4,448,673	5,839,276	6,598,873	6,544,440	5,593,938	-	-	-	-	-
PPFAC Factor	(0.00553)	(0.00553)	(0.00553)	(0.00553)	(0.00553)	0.04794	0.04794	0.04794	0.04794	0.04794
PPFAC Recoveries	(473,646)	(621,702)	(702,575)	(696,780)	(595,581)	4,386,510	4,151,604	4,223,514	4,233,102	4,204,338
Total	3,975,027	5,217,574	5,896,298	5,847,660	4,998,357	4,386,510	4,151,604	4,223,514	4,233,102	4,204,338
Ending Balance	3,640,404	14,853,622	28,450,055	44,168,395	52,276,038	47,889,528	43,737,924	39,514,410	35,281,308	31,076,970
<b>New Bank:</b>										
Beg. Balance						0	(282)	(210,801)	(498,167)	(790,477)
Power Supply Costs						5,361,619	4,666,197	4,534,388	4,443,945	4,961,097
Sales (kWh)						91,500,000	86,600,000	88,100,000	88,300,000	87,700,000
Recoveries:										
Base Rates @ \$.05194						4,752,510	4,498,004	4,575,914	4,586,302	4,555,138
Phased-in 12-month Rolling Average Cost of Power						0.05860	0.05630	0.05470	0.05359	0.05418
PPFAC Factor (Avg. costs - \$.05194)						0.00666	0.00436	0.00276	0.00165	0.00224
PPFAC Recoveries						609,390	377,576	243,156	145,695	196,448
Total						5,361,900	4,875,580	4,819,070	4,731,997	4,751,586
Balance Before Interest						(281)	(209,666)	(495,483)	(786,219)	(580,967)
Interest at 6.50%						(2)	(1,136)	(2,684)	(4,259)	(3,147)
Ending Balance						(282)	(210,801)	(498,167)	(790,477)	(584,114)
Total - Both Banks						47,889,246	43,527,123	39,016,243	34,490,831	30,492,856
Total PPFAC Rate (\$/kwh)						0.05460	0.05230	0.05070	0.04959	0.05018

Arizona Electric Division  
Analysis of PPFAC Banks - PGA Method

Month:	Mar-01	Apr-01	May-01	Jun-01	Jul-01	Aug-01	Sep-01
<b>Existing Bank:</b>							
Beg. Balance	31,076,970	26,863,044	22,553,238	17,864,706	17,915,220	11,673,432	5,378,910
Power Supply Costs	-	-	-	-	-	-	-
Sales (kWh)	87,900,000	89,900,000	97,800,000	111,400,000	130,200,000	131,300,000	112,200,000
Recoveries:							
Base Rates @ \$.05194	-	-	-	-	-	-	-
PPFAC Factor	0.04794	0.04794	0.04794	0.04794	0.04794	0.04794	0.04794
PPFAC Recoveries	4,213,926	4,309,806	4,688,532	5,340,516	6,241,788	6,294,522	5,378,868
Total	4,213,926	4,309,806	4,688,532	5,340,516	6,241,788	6,294,522	5,378,868
Ending Balance	26,863,044	22,553,238	17,864,706	12,524,190	11,673,432	5,378,910	42
<b>New Bank:</b>							
Beg Balance	(584,114)	(828,374)	(504,752)	(330,729)	8,172,753	16,281,793	27,416,125
Power Supply Costs	4,475,159	5,203,416	5,508,839	15,847,500	17,915,220	22,467,500	13,663,500
Sales (kWh)	87,900,000	89,900,000	97,800,000	111,400,000	130,200,000	131,300,000	112,200,000
Recoveries:							
Base Rates @ \$.05194	4,565,526	4,669,406	5,079,732	5,786,116	6,762,588	6,819,722	5,827,668
Phased-in 12-month Rolling Average Cost of Power	0.05364	0.05425	0.05453	0.06632	0.07599	0.08744	0.09065
PPFAC Factor (Avg. costs - \$.05194)	0.00170	0.00231	0.00256	0.01436	0.02405	0.03550	0.03871
PPFAC Recoveries	149,430	207,669	253,302	1,601,932	3,131,310	4,661,150	4,343,262
Total	4,714,956	4,877,075	5,333,034	7,388,048	9,893,898	11,480,872	10,170,930
Balance Before Interest	(823,911)	(502,033)	(328,947)	8,128,723	16,194,075	27,268,421	30,908,695
Interest at 6.50%	(4,463)	(2,719)	(1,782)	44,031	87,718	147,704	167,422
Ending Balance	(828,374)	(504,752)	(330,729)	8,172,753	16,281,793	27,416,125	31,076,117
Total - Both Banks	26,034,670	22,048,485	17,533,977	20,696,943	27,955,225	32,795,035	31,076,159
Total PPFAC Rate (\$/kwh)	0.04964	0.05025	0.05053	0.06232	0.07199	0.08344	0.08665

# EXHIBIT NO. 6

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# Arizona Electric Utilities Comparison of Residential Rates

Utility	Summer (May-Oct.) Bills			Winter (Nov. - April) Bills			Total Average Monthly Bills		
	500 kWh	1,000 kWh	1,500 kWh	500 kWh	1,000 kWh	1,500 kWh	500 kWh	1,000 kWh	1,500 kWh
Duncan Valley	32.55	43.55	54.55	32.55	43.55	54.55	32.55	43.55	54.55
CUC - MED	41.18	75.87	110.55	41.18	75.87	110.55	41.18	75.87	110.55
CUC - SCED	43.38	80.27	117.15	43.38	80.27	117.15	43.38	80.27	117.15
Garkane Electric Co-op	44.04	75.57	107.11	44.04	75.57	107.11	44.04	75.57	107.11
Graham County Electric Co-op	45.70	83.39	121.09	45.70	83.39	121.09	45.70	83.39	121.09
TEP	50.36	95.82	141.28	44.39	83.87	123.36	47.38	89.85	132.32
APS	49.36	107.04	170.12	46.40	85.29	124.19	47.88	96.17	147.16
Mohave Electric Co-op	48.10	86.69	125.29	48.10	86.69	125.29	48.10	86.69	125.29
Navapache Electric Co-op	53.15	95.04	136.94	53.15	95.04	136.94	53.15	95.04	136.94
Sulphur Springs	54.25	99.84	144.26	54.25	99.84	144.26	54.25	99.84	144.26
Trico Electric	55.15	102.30	149.45	55.15	102.30	149.45	55.15	102.30	149.45

Note: The above reflect current PPFAC adjustors, but do not include sales taxes or ACC/RUCO assessments.

# EXHIBIT NO. 7

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**Arizona Electric Division**  
**Analysis of PPFAC Banks - Proposed Modified PGA Method**

EXHIBIT NO. 7  
Page 1 of 6

Month:	May-00	Jun-00	Jul-00	Aug-00	Sep-00	Oct-00	Nov-00
<u>Existing Bank:</u>							
Beg. Balance	(2,202,700)	3,640,404	14,853,622	28,450,055	44,168,395	52,276,038	51,086,532
Power Supply Costs	9,818,131	16,430,792	19,492,731	21,566,000	13,106,000	-	-
Sales (kWh)	85,650,223	112,423,491	127,048,000	126,000,000	107,700,000	91,500,000	86,600,000
Recoveries:							
Base Rates @ \$.05194	4,448,673	5,839,276	6,598,873	6,544,440	5,593,938	-	-
PPFAC Factor	(0,00553)	(0,00553)	(0,00553)	(0,00553)	(0,00553)	0,014690	0,014690
PPFAC Recoveries	(473,646)	(621,702)	(702,575)	(696,780)	(595,581)	1,344,135	1,272,154
Total	3,975,027	5,217,574	5,896,298	5,847,660	4,998,357	1,344,135	1,272,154
Balance Before Interest	3,640,404	14,853,622	28,450,055	44,168,395	52,276,038	50,931,903	49,814,378
A.D.I.T. @ 39.28%						(20,006,051)	(19,567,088)
Balance For Interest						30,925,851	30,247,290
Interest @ 6%						154,629	151,236
Ending Balance						51,086,532	49,965,615
<u>New Bank:</u>							
Beg Balance						0	-
Power Supply Costs						5,361,619	4,666,197
Sales (kWh)						91,500,000	86,600,000
Recoveries:							
Base Rates @ \$.05194						4,752,510	4,498,004
Rolling Average Cost of Power						0.05860	0.05630
PPFAC Factor (Avg. costs - \$.05194)						0.00666	0.00436
PPFAC Recoveries						609,109	377,958
Total						5,361,619	4,875,962
Balance Before Interest						\$ -	\$ (209,765)
A.D.I.T. @ 39.28%						\$ -	\$ -
Balance For Interest						\$ -	(209,765)
Interest @ 6%						\$ -	(1,049)
Ending Balance						\$ -	(210,814)
Old Bank Ending Balance						51,086,532	49,965,615
Total - Both Banks						51,086,532	49,754,800
Total PPFAC Rate (\$/kwh)						0.02135	0.01905

# Arizona Electric Division Analysis of PPFAC Banks

EXHIBIT NO. 7  
Page 2 of 6

Month: Dec-00 Jan-01 Feb-01 Mar-01 Apr-01 May-01 Jun-01 Jul-01  
Existing Bank:  
Beg. Balance 49,965,615 48,819,192 47,666,342 46,518,833 45,364,893 44,177,980 42,871,061 41,359,783

Power Supply Costs - - - - - - -

Sales (KWh) 88,100,000 88,300,000 87,700,000 87,900,000 89,900,000 97,800,000 111,400,000 130,200,000

Recoveries:  
Base Rates @ \$.05194 - - - - - - -  
PPFAC Factor 0.014690 0.014690 0.014690 0.014690 0.014690 0.014690 0.014690 0.014690  
PPFAC Recoveries 1,294,189 1,297,127 1,288,313 1,291,251 1,320,631 1,436,682 1,636,466 1,912,638  
Total 1,294,189 1,297,127 1,288,313 1,291,251 1,320,631 1,436,682 1,636,466 1,912,638

Balance Before Interest 48,671,426 47,522,065 46,378,029 45,227,582 44,044,262 42,741,298 41,234,595 39,447,145  
A.D.I.T. @ 39.28% (19,118,136) (18,666,667) (18,217,290) (17,765,394) (17,300,586) (16,788,782) (16,196,949) (15,494,839)  
Balance For Interest 29,553,290 28,855,398 28,160,739 27,462,188 26,743,676 25,952,516 25,037,646 23,952,306  
Interest @ 6% 147,766 144,277 140,804 137,311 133,718 129,763 125,188 119,762  
Ending Balance 48,819,192 47,666,342 46,518,833 45,364,893 44,177,980 42,871,061 41,359,783 39,566,906

New Bank:  
Beg Balance (210,814) (497,273) (786,766) (576,207) (817,204) (489,231) (312,547) 8,189,202

Power Supply Costs 4,534,388 4,443,945 4,961,097 4,475,159 5,203,416 5,508,839 15,847,500 17,915,220

Sales (KWh) 88,100,000 88,300,000 87,700,000 87,900,000 89,900,000 97,800,000 111,400,000 130,200,000

Recoveries:  
Base Rates @ \$.05194 4,575,914 4,586,302 4,555,138 4,565,526 4,669,406 5,079,732 5,786,116 6,762,588  
Rolling Average Cost of Power 0.05470 0.05359 0.05418 0.05364 0.05425 0.05453 0.06632 0.07599  
PPFAC Factor (Avg. costs - \$.05194) 0.00276 0.00165 0.00224 0.00170 0.00231 0.00259 0.01438 0.02405  
PPFAC Recoveries 243,508 145,695 196,448 149,430 207,669 253,302 1,601,932 3,131,310  
Total 4,819,422 4,731,997 4,751,586 4,714,956 4,877,075 5,333,034 7,388,048 9,893,898

Balance Before Interest \$ (494,799) \$ (782,851) \$ (573,341) \$ (813,138) \$ (486,797) \$ (310,992) \$ 8,148,460 \$16,169,782  
A.D.I.T. @ 39.28% - - - - - - - -  
Balance For Interest (494,799) (782,851) (573,341) (813,138) (486,797) (310,992) 8,148,460 16,169,782  
Interest @ 6% (2,474) (3,914) (2,867) (4,066) (2,434) (1,555) 40,742 80,849  
Ending Balance (497,273) (786,766) (576,207) (817,204) (489,231) (312,547) 8,189,202 16,250,631  
Old Bank Ending Balance 48,819,192 47,666,342 46,518,833 45,364,893 44,177,980 42,871,061 41,359,783 39,566,906  
Total - Both Banks 48,321,919 46,879,577 45,942,626 44,547,689 43,688,749 42,558,514 49,548,985 55,817,537  
Total PPFAC Rate (\$/kwh) 0.01745 0.01634 0.01693 0.01639 0.01700 0.01728 0.02907 0.03874

# Arizona Electric Division Analysis of PPFAC Banks

EXHIBIT NO. 7  
Page 3 of 6

Month:	Aug-01	Sep-01	Oct-01	Nov-01	Dec-01	Jan-02	Feb-02
<u>Existing Bank:</u>							
Beg. Balance	39,566,906	37,752,379	36,213,773	34,919,511	33,696,466	32,447,605	31,192,007
Power Supply Costs	-	-	-	-	-	-	-
Sales (kWh)	131,300,000	112,200,000	95,300,000	90,200,000	91,700,000	91,900,000	91,300,000
Recoveries:							
Base Rates @ \$.05194	-	-	-	-	-	-	-
PPFAC Factor	0.014690	0.014690	0.014690	0.014690	0.014690	0.014690	0.014690
PPFAC Recoveries	1,928,797	1,648,218	1,399,957	1,325,038	1,347,073	1,350,011	1,341,197
Total	1,928,797	1,648,218	1,399,957	1,325,038	1,347,073	1,350,011	1,341,197
Balance Before Interest	37,638,109	36,104,161	34,813,816	33,594,473	32,349,393	31,097,594	29,850,810
A.D.I.T. @ 39.28%	(14,784,249)	(14,181,714)	(13,674,867)	(13,195,909)	(12,706,841)	(12,215,135)	(11,725,398)
Balance For Interest	22,853,860	21,922,446	21,138,949	20,398,564	19,642,551	18,882,459	18,125,412
Interest @ 6%	114,269	109,612	105,695	101,993	98,213	94,412	90,627
Ending Balance	37,752,379	36,213,773	34,919,511	33,696,466	32,447,605	31,192,007	29,941,437
<u>New Bank:</u>							
Beg Balance	16,250,631	27,292,192	23,782,159	27,117,758	30,692,143	34,437,941	38,211,714
Power Supply Costs	22,467,500	13,663,500	5,286,586	4,555,987	4,492,826	4,459,942	4,897,111
Sales (kWh)	131,300,000	112,200,000	95,300,000	90,200,000	91,700,000	91,900,000	91,300,000
Recoveries:							
Base Rates @ \$.05194	6,819,722	5,827,668	4,949,882	4,684,988	4,762,898	4,773,286	4,742,122
Rolling Average Cost of Power	0.08744	0.09065	0.09030	0.08994	0.08964	0.08939	0.08908
PPFAC Factor (Avg. costs - \$.05194)	0.03550	0.03871	0.03836	0.03800	0.03770	0.03745	0.03714
PPFAC Recoveries	4,661,150	4,343,262	3,655,708	3,427,600	3,457,090	3,441,655	3,390,882
Total	11,480,872	10,170,930	8,605,590	8,112,588	8,219,988	8,214,941	8,133,004
Balance Before Interest	\$27,156,410	\$23,663,840	\$26,982,844	\$30,539,446	\$34,266,608	\$38,021,606	\$41,257,499
A.D.I.T. @ 39.28%	\$-	\$-	\$-	\$-	\$-	\$-	\$-
Balance For Interest	27,156,410	23,663,840	26,982,844	30,539,446	34,266,608	38,021,606	41,257,499
Interest @ 6%	135,782	118,319	134,914	152,697	171,333	190,108	206,287
Ending Balance	27,292,192	23,782,159	27,117,758	30,692,143	34,437,941	38,211,714	41,463,786
Old Bank Ending Balance	37,752,379	36,213,773	34,919,511	33,696,466	32,447,605	31,192,007	29,941,437
Total - Both Banks	65,044,571	59,995,932	62,037,269	64,388,608	66,885,546	69,403,721	71,405,223
Total PPFAC Rate (\$/kwh)	0.05019	0.05340	0.05305	0.05269	0.05239	0.05214	0.05183



# Arizona Electric Division Analysis of PPFAC Banks

EXHIBIT NO. 7  
Page 4 of 6

Month:	Mar-02	Apr-02	May-02	Jun-02	Jul-02	Aug-02	Sep-02	Oct-02
<u>Existing Bank:</u>								
Beg. Balance	29,941,437	28,682,650	27,390,572	25,972,274	24,340,439	22,416,325	20,470,161	18,809,834

Power Supply Costs	-	-	-	-	-	-	-	-
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Sales (KWh)	91,600,000	93,600,000	101,900,000	116,100,000	135,600,000	136,700,000	116,900,000	99,300,000
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Recoveries:	-	-	-	-	-	-	-	-
Base Rates @ \$.05194	0.014690	0.014690	0.014690	0.014690	0.014690	0.014690	0.014690	0.014690
PPFAC Factor	1,345,604	1,374,984	1,496,911	1,705,509	1,991,964	2,008,123	1,717,261	1,458,717
PPFAC Recoveries	1,345,604	1,374,984	1,496,911	1,705,509	1,991,964	2,008,123	1,717,261	1,458,717
Total	28,595,833	27,307,666	25,893,661	24,266,765	22,348,475	20,408,202	18,752,900	17,351,117

Balance Before Interest	(11,232,443)	(10,726,451)	(10,171,030)	(9,531,985)	(8,778,481)	(8,016,342)	(7,366,139)	(6,815,519)
A.D.I.T. @ 39.28%	17,363,390	16,581,215	15,722,631	14,734,780	13,569,994	12,391,860	11,386,761	10,535,598
Balance For Interest	86,817	82,906	78,613	73,674	67,850	61,959	56,934	52,678
Interest @ 6%	28,682,650	27,390,572	25,972,274	24,340,439	22,416,325	20,470,161	18,809,834	17,403,795
Ending Balance	41,463,786	45,117,714	48,220,877	51,754,896	45,488,569	38,824,915	27,546,863	23,710,863

<u>New Bank:</u>	4,501,080	5,201,491	5,475,219	16,501,875	18,650,085	23,386,875	14,233,875	5,711,735
Beg Balance	91,600,000	93,600,000	101,900,000	116,100,000	135,600,000	136,700,000	116,900,000	99,300,000

Power Supply Costs	4,501,080	5,201,491	5,475,219	16,501,875	18,650,085	23,386,875	14,233,875	5,711,735
Sales (KWh)	91,600,000	93,600,000	101,900,000	116,100,000	135,600,000	136,700,000	116,900,000	99,300,000

Recoveries:	4,757,704	4,861,584	5,292,686	6,030,234	7,043,064	7,100,198	6,071,786	5,157,642
Base Rates @ \$.05194	0.08883	0.08856	0.08824	0.08843	0.08864	0.08899	0.08911	0.08917
Rolling Average Cost of Power	0.03689	0.03662	0.03630	0.03649	0.03670	0.03705	0.03717	0.03723
PPFAC Factor (Avg. costs - \$.05194)	3,379,124	3,427,632	3,698,970	4,236,489	4,976,520	5,064,735	4,345,173	3,686,939
PPFAC Recoveries	8,136,828	8,289,216	8,991,656	10,266,723	12,019,584	12,164,933	10,416,959	8,854,581
Total	\$ 44,893,247	\$ 47,980,973	\$ 51,497,409	\$ 45,262,257	\$ 38,631,756	\$ 27,409,814	\$ 23,592,898	\$ 26,735,744

Balance Before Interest	\$ 44,893,247	\$ 47,980,973	\$ 51,497,409	\$ 45,262,257	\$ 38,631,756	\$ 27,409,814	\$ 23,592,898	\$ 26,735,744
A.D.I.T. @ 39.28%	-	-	-	-	-	-	-	-
Balance For Interest	44,893,247	47,980,973	51,497,409	45,262,257	38,631,756	27,409,814	23,592,898	26,735,744
Interest @ 6%	224,466	239,905	257,487	226,311	193,159	137,049	117,964	133,619
Ending Balance	45,117,714	48,220,877	51,754,896	45,488,569	38,824,915	27,546,863	23,710,863	26,869,423
Old Bank Ending Balance	28,682,650	27,390,572	25,972,274	24,340,439	22,416,325	20,470,161	18,809,834	17,403,795
Total - Both Banks	73,800,363	75,611,449	77,727,170	69,829,007	61,241,240	48,017,024	42,520,697	44,273,218
Total PPFAC Rate (\$/kwh)	0.05158	0.05131	0.05099	0.05118	0.05139	0.05174	0.05186	0.05192

# Arizona Electric Division Analysis of PPFAC Banks

EXHIBIT NO. 7  
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Month:

Existing Bank:

Beg. Balance

Power Supply Costs

Sales (KWh)

Recoveries:

Base Rates @ \$.05194

PPFAC Factor

PPFAC Recoveries

Total

Balance Before Interest

A.D.I.T. @ 39.28%

Balance For Interest

Interest @ 6%

Ending Balance

New Bank:

Beg Balance

Power Supply Costs

Sales (KWh)

Recoveries:

Base Rates @ \$.05194

Rolling Average Cost of Power

PPFAC Factor (Avg. costs - \$.05194)

PPFAC Recoveries

Total

Balance Before Interest

A.D.I.T. @ 39.28%

Balance For Interest

Interest @ 6%

Ending Balance

Old Bank Ending Balance

Total - Both Banks

Total PPFAC Rate (\$/kwh)

	Nov-02	Dec-02	Jan-03	Feb-03	Mar-03	Apr-03	May-03
Beg. Balance	17,403,795	16,073,054	14,716,171	13,350,748	11,990,021	10,622,215	9,217,841
Power Supply Costs	-	-	-	-	-	-	-
Sales (KWh)	93,900,000	95,400,000	95,700,000	95,100,000	95,300,000	97,500,000	106,100,000
Recoveries:	-	-	-	-	-	-	-
Base Rates @ \$.05194	0.014690	0.014690	0.014690	0.014690	0.014690	0.014690	0.014690
PPFAC Factor	1,379,391	1,401,426	1,405,833	1,397,019	1,399,957	1,432,275	1,558,609
PPFAC Recoveries	1,379,391	1,401,426	1,405,833	1,397,019	1,399,957	1,432,275	1,558,609
Total	16,024,404	14,671,628	13,310,338	11,953,729	10,590,064	9,189,940	7,659,232
Balance Before Interest	(6,294,386)	(5,763,015)	(5,228,301)	(4,695,425)	(4,159,777)	(3,609,808)	(3,008,546)
A.D.I.T. @ 39.28%	9,730,018	8,908,612	8,082,037	7,258,304	6,430,287	5,580,132	4,650,686
Balance For Interest	48,650	44,543	40,410	36,292	32,151	27,901	23,253
Interest @ 6%	16,073,054	14,716,171	13,350,748	11,990,021	10,622,215	9,217,841	7,682,485
Ending Balance	26,869,423	30,631,735	34,530,955	38,447,855	41,892,798	45,689,553	48,972,273
<u>New Bank:</u>							
Beg Balance	4,608,811	4,588,340	4,581,060	4,978,419	4,631,331	5,319,720	5,479,266
Power Supply Costs							
Sales (KWh)	93,900,000	95,400,000	95,700,000	95,100,000	95,300,000	97,500,000	106,100,000
Recoveries:							
Base Rates @ \$.05194	4,877,166	4,955,076	4,970,658	4,939,494	4,949,882	5,064,150	5,510,834
Rolling Average Cost of Power	0.08895	0.08876	0.08859	0.08839	0.08824	0.08806	0.08778
PPFAC Factor (Avg. costs - \$.05194)	0.03701	0.03682	0.03665	0.03645	0.03630	0.03612	0.03584
PPFAC Recoveries	3,475,239	3,513,084	3,507,815	3,466,729	3,459,315	3,521,958	3,802,375
Total	8,352,405	8,468,160	8,478,473	8,406,223	8,409,197	8,586,108	9,313,209
Balance Before Interest	\$ 30,479,338	\$ 34,359,159	\$ 38,256,572	\$ 41,684,376	\$ 45,462,242	\$ 48,728,630	\$ 52,562,572
A.D.I.T. @ 39.28%	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -	\$ -
Balance For Interest	30,479,338	34,359,159	38,256,572	41,684,376	45,462,242	48,728,630	52,562,572
Interest @ 6%	152,397	171,796	191,283	208,422	227,311	243,643	262,813
Ending Balance	30,631,735	34,530,955	38,447,855	41,892,798	45,689,553	48,972,273	52,825,385
Old Bank Ending Balance	16,073,054	14,716,171	13,350,748	11,990,021	10,622,215	9,217,841	7,682,485
Total - Both Banks	46,704,789	49,247,126	51,798,603	53,882,819	56,311,769	58,190,114	60,507,870
Total PPFAC Rate (\$/kwh)	0.05170	0.05151	0.05134	0.05114	0.05099	0.05081	0.05053

# Arizona Electric Division Analysis of PPFAC Banks

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Month:

Jun-03

Jul-03

Aug-03

Sep-03

Existing Bank:

Beg. Balance

7,682,485

5,925,870

3,864,809

1,778,335

Power Supply Costs

-

-

-

-

Sales (kWh)

120,800,000

141,100,000

142,400,000

121,700,000

Recoveries:

Base Rates @ \$.05194

PPFAC Factor

0.014690

0.014690

0.014690

0.014690

PPFAC Recoveries

1,774,552

2,072,759

2,091,856

1,787,773

Total

Balance Before Interest

A.D.I.T. @ 39.28%

5,907,933

3,853,111

1,772,953

(9,438)

Balance For Interest

Interest @ 6%

(2,320,636)

(1,513,502)

(696,416)

3,707

Ending Balance

3,587,297

2,339,609

1,076,537

(5,731)

New Bank:

17,936

11,698

5,383

(29)

Power Supply Costs

5,925,870

3,864,809

1,778,335

(9,466)

Sales (kWh)

52,825,385

54,805,933

56,712,483

57,955,353

Recoveries:

Base Rates @ \$.05194

Rolling Average Cost of Power

7,775,959

8,311,579

7,252,845

6,372,716

PPFAC Factor (Avg. costs - \$.05194)

PPFAC Recoveries

120,800,000

141,100,000

142,400,000

121,700,000

Total

Balance Before Interest

A.D.I.T. @ 39.28%

6,274,352

7,328,734

7,396,256

6,321,098

Balance For Interest

Interest @ 6%

0.08068

0.07235

0.05962

0.05337

Ending Balance

0.02874

0.02041

0.00768

0.00143

Old Bank Ending Balance

3,472,301

2,879,910

1,093,276

174,151

Total - Both Banks

9,746,653

10,208,644

8,489,532

6,495,249

\$54,533,266 \$56,430,331 \$57,667,018 \$57,789,551

\$ - \$ - \$ - \$ -

54,533,266 56,430,331 57,667,018 57,789,551

272,666 282,152 288,335 288,948

54,805,933 56,712,483 57,955,353 58,078,499

5,925,870 3,864,809 1,778,335 (9,466)

60,731,802 60,577,291 59,733,688 58,069,033

0.04343 0.03510 0.02237 0.01612